Villa Complexes in the Late Antique West

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Villa Complexes in the Late Antique West

Case Studies of Transformation, Regionalisation and Migration 250-650AD

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door

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Preface

This study came from an interest sparked in the dim and distant past of 2012. I took an elective course in the 3rd year of my undergraduate Classical Studies BA at the University of Newcastle-upon-Tyne called 'Regionality and the Fall of Rome' as it seemed better than another exceedingly dull module on the Aeneid. It turned out that archaeology was much more interesting than classical literary criticism. During my MA from 2013-2014, this interest sprawled into a dissertation on 'squatter occupation' in Late Roman villas in *Britannia* with Dr. James Gerrard. Initially, I was more interested in theories of decline and collapse and how the models for the end of the Roman period could be applied to the end of the Late Helladic Period in Greece, however, this fell by the wayside when it turned out that I was more interested in working on Late Antiquity. My MA thesis focused on the three diverse regions of the province reutilised in this PhD thesis. It developed the first temporal and spatial analysis of villa transformation in Roman Britain and exposed a more complex situation than had been previously considered. After several years of (mostly) soul-destroying commercial work in the UK and Germany and repeated visits to see friends in the Netherlands, I applied for NWO funding at the VU with Nico and Stijn in 2016, after a year of initial research that proposed expanding, codifying and analysing detailed regional snapshots of villa transformation. Although this application was unsuccessful, I felt I had invested too much time and energy into it to give up and decided to carry on self-funded. Looking back 4 years later, it still seems the right choice, despite years of no (real) holidays and awful, demoralising blocks of work. Every summer period and Christmas holiday I worked in a range of jobs: (including but not limited to) house painter, golf course greenkeeper, farm labourer (and strawberry picker) and commercial archaeologist, usually back in Scotland as I could earn more and spend less, in order to carry the research on during the autumn and winter. It is not an approach that I would advise for other part-time promovendi. I got there in the end, despite COVID-19 attempting to throw a spanner in the works in spring and summer 2020 and I am glad my perseverance has paid off in the completion of this research.

Acknowledgements

A number of people need an acknowledgement for their role in this thesis. Firstly, my parents, Sue and Chris Dodd, who have supported this process from the beginning without complaint and allowed me room and board during my frequent periods back in rural Scotland for employment. Without them, this thesis would never have been completed and Bert would have been spared a lot of time drawing endless villa plans. They deserve some kind of medal for this; however, they will be getting a large book full of the aforementioned plans instead. Secondly, my supervisors, Professor Nico Roymans and Doctor Stijn Heeren, who both put up with a young man turning up at their doorstep with a PhD proposal and then encouraged me through balancing the thesis with employment on farms and golf courses. I thank them both for their support and help in achieving this. I would like to thank Doctor Tesse Stek and the KNIR for arranging my stay in Rome in December 2019 to complete my data collection and Bert Brouwenstijn for his invaluable help in drawing out many, many villa plans over the course of 2019 and 2020. Doctor James Gerrard also deserves a mention for propelling me down this road in the first place, back in the distant past of 2013. Within the university, I would like to thank my PhD colleagues as well as our periodically resident postdocs, Dr. Andrew Lawrence and Dr. José Costa for various iterations of 'we'll just have one' drinks on a Friday night. I would also like to thank the proofreaders: Ingy Moore and Jan Dalton, who read the individual chapters with no grounding in the subject and little interest in the intricacies of agricultural economics in the Later Roman Empire. This includes Silke Hahn, who looked at my German text and Johanna Van Balen (with the help of Eloi Borràs Gilavert), who checked my notoriously bad French, Catalan and Spanish spelling. I would also like to thank the committee members who waded through this: Prof. Jan Paul Crielaard (VU Amsterdam), Prof. Wim de Clercq (Universiteit Gent), Dr. James Gerrard (Newcastle University), Dr. Pilar Diarte-Blasco (Universidad de Alcalá) and Prof. Joanita Vroom (Universiteit Leiden).

Outside the academic world I would like to the thank the Dutch girls who turned up at Maryport in the summer of 2014 and later helped me settle into life in the Netherlands in 2016: that sunny day in August seems so long ago now. I doubt I would be here now without you all. In particular, I would like to thank Robbin van Splunder, not only for her friendship and support, but also for her patience in allowing me to stay repeatedly in her flat, often for long periods between housing contracts, and of course, letting me take Dana the dog (who of course has no idea of her importance) for walks when she came to visit. I would also like to thank Silke Hahn for her relentless encouragement to get through the periods of summer employment and for answering repeated requests for highly obscure German journals as well as Mark and Petra for their kind hospitality over the last few years. I would like to thank those people that helped through my 'working holidays', especially Cat Chapman and Sam Whitehouse for kindly putting me up in their spare room in York in the summer of 2017 and Victoria Anderton-Johnson for providing an occasionally sympathetic ear as well as Jeanne Kroeger (and by extension, Jack Chartres) for repeatedly employing me to update the website and for all the coffee. I would also like to thank the group of friends that I spend Hogmanay with, especially Richard Farran, Pete Kemp, Cat Wightman, and Mark Roberts. They need an honourable mention for keeping me sane (whether they realised it or not) and giving me a yearly outlet of the New Year 'Incidents Pit' to let off steam. Finally, I would also like to thank Johanna Van Balen for her long friendship, support and encouragement throughout this process and putting up with my nonsense for so many years.

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Chapter 1 - Introduction and theoretical overview

1.1 GENERAL INTRODUCTION

The *villa* was the basic building block of the Roman economy in the Western Empire. It provided the foundation for a whole host of social and economic mechanisms. The entire economic base of agricultural production, taxation, land ownership and food supply were, in many regions, structured and dominated by the villa system (Roymans and Derks 2011, 1-4). The villa was not only an economic unit but also a social one. It allowed the landed elites a significant degree of social expression and a forum to articulate to some degree their *Romanitas* through the addition of non-functional and monumentalising features (Slofstra 1991, 179-182; Hingley 2005, 87-89; Smith *et al.* 2016, 33-37). This system was rooted in the dialectic relationship between the urban and rural spheres, with the urban power centres and the rural retreats of the curial classes complementing each other in a shared cycle of production and consumption of commodities, intimately tied to market supply and demand in the urban centres (Roymans and Derks 2011, 14-22). Despite these powerful internationalising forces of consumption and production, local identities and patterns are evident (Percival 1976; Rudling 1998; Lenz 1999; Roymans and Habermehl 2011; Rind 2015) because of a variety of wide-ranging factors (Roymans and Derks 2011, 17-28).

Between the 3rd and 6th centuries AD, the rural fabric, structured around the socio-economic hegemony of the villa system, experienced severe dislocation and abrupt change, eventually failing altogether (Lewit 2003; Esmonde Cleary 2013, 413-414 for example). The hybrid classicising rural society of the Roman world (Woolf 1998; Crowley 2009) adopted more utilitarian and functional styles of occupation, abandoning Romanising socio-cultural conventions of architecture and identity.

The breakdown of the villa landscape is perceptible across both halves of the Roman Empire. Archaeologically, this breakdown is visible in the Latin West through the abandonment and re-use of high-status architectural elements for secondary purposes and the apparent 'decay' of the villa fabric. This transformation occurs at different times in different parts of the Roman West during Late Antiquity but its first appearances are in Britain and along the Lower Rhine at the end of the 2nd and the very beginning of the 3rd century AD (Dodd 2014). The redefinition of social space and the adoption of new lifestyles are key elements in the development of Roman rural buildings in landscapes of later centuries; representing a transitional phase between the world of the hierarchical state and a more subsistence based and less hierarchical system. These changes, together with migration, regionalisation and architectural transformation have all left their imprint on the development sequence of villas (Van Ossel 1992; Chavarría 2007). This shift in rural occupation patterns is part of a much larger canvas of change. Evidence indicates that occupation at a variety of different site types shifted during Late Antiquity, with the same types of transformed occupation present in both urban contexts and military installations (Wilmott 1997, 203–24; Collins 2017, 212-215).

This study describes villa transformation and addresses its significance for the economy and society, bringing together data from a variety of areas to assess the broad archaeological trends in villa settlements. The research examines the phenomenon of villa transformation between the 3rd and 6th centuries AD, in three diverse regions of the Roman West, each with differing military-political trajectories. *Britannia* (an area of steady change) and Northeast Gaul (representing dramatic change and including Frankish migration within a North European context) is contrasted with Visigothic South Gaul and Catalonia

where migration occurred within a highly Romanised landscape according to the literary sources; however, there is significant disagreement to what extent these migrations are visible in the archaeological record.

1.2 RESEARCH QUESTIONS AND AIMS OF THE STUDY

This study aims to answer a series of broad questions, supported by research aims, about the transformation of villa landscapes in the Latin West:

1. ***How divergent was the morphological development of villa transformation across the Western Roman Empire?***

Aims:

– Develop a cohesive methodology for assessing morphological development that is applicable across both Northern and Southern Europe.
– Applying this method, using statistical analysis, to build a standard set of attributes by which regional developments can be assessed and compared against one other.

2. ***How different were the spatial distributions and temporal trajectories of villa transformation across the Western Roman Empire?***

Aims:

– Establish the regional differences in the spatial distributions of villa transformation and the breakdown of different classes of transformation.
– Assess the temporal trajectories of the three different regions under study and demonstrate the variability of settlement and landscape cultural biographies.
– Examine the socio-political, economic and cultural underpinnings of regional trajectories and distributions.

3. ***What functions did the transformed villa estates fulfil in later periods and how did these functions develop?***

Aims:

– Develop a coherent model for the socio-economic transformation and later development of the villa complexes.
– Assess the regional variability of long-term transformation at villa complexes in the Latin West.
– Establish the social interactions and engagement at villa complexes in their transforming phases.
– Examine the socio-economic feasibility and implications of this transition.

1.3 KEY CONCEPTS

The key concepts of this study are fourfold: the term *villa* itself and its definition, villa transformation, migration and a range of terms dealing with scales and resolutions. This section deals with the historical framework and outlines the definition of these key terms in this study.

1.3.1 VILLA AND VILLA SETTLEMENTS

The word 'villa' is deeply problematic. The word has been in use since the Classical period and has been severely confused and misrepresented by 150 years of different perspectives, poor definitions and partial

excavations of villa sites. It has been argued over, defined and counter-defined since the advent of early archaeology in the 18th and 19th centuries. Willems (1981, 112) has deftly summed up the terminological situation, stating '*exactly what constitutes a Roman villa is a subject that will probably be debated forever…*'

The Latin concept of the *villa rustica* refers to a type of rural residence favoured by the Roman elites, and the use of the term is most in vogue during the Republican and Early Imperial periods (Cato, *De Agricultura* 1.4.1, Varro *Res Rusticae*, 3.2.10). The term, however, appears in a wide variety of spatially and temporally diverse sources, often in a frustratingly vague and inconsistent way (Rivet 1969, 178-179; Percival 1976, 14-15). It was applied to anything from elite rural retreats to the estate centres of large *latifundia* by different writers at separate times and it is often difficult to pin down reality through allegory and metaphor (Dark 2005). This is further confused when considering the vast climatic variation and differing cultural traditions which make it impossible to apply a Mediterranean-centric Latin concept to the entire rural organisation of the Western Empire.

Archaeologically, the term has tended to refer to rural dwellings demonstrating some element of *Romanitas*. This definition, drawing on the Latin term, seeks to take elements of the ancient descriptions whilst ignoring the literary connotations. This morphological approach has inevitably led to the term being applied to any rectangular rural main house, especially in the northwest provinces (Percival 1976, 13; *cf.* Habermehl 2014, 17-18). The dichotomy between the archaeological evidence and the literary terms has led to two diverging schools of thought; first an 'Italic model', rooting villas in an historical interpretative model[1] and secondly, an archaeological model, viewing villas from within a landscape-archaeological perspective (*cf.* Hingley 1989, 3; Roymans and Derks 2011, 1-4). This latter perspective has led to the development of a socio-cultural definition of the villa. In some cases, the villa has been stripped of its classical veneer and essentially reduced to a form of 'glorified farmstead' (Reece 1988, 49); whilst in others, it has been assumed as the primary driver behind rural production and elite expression (Slofstra 1991, 175-177). Abstract evolution models and settlement hierarchies have been developed around this form of definition (Hodder and Millet 1980; Slofstra and Brandt 1983), with these socio-economic associations and presumptions becoming the defining characteristics of a villa.

This study will approach the villa within this well-established tradition, rejecting the literary definitions in favour of an archaeologically grounded definition. It will define the term within a practical framework, approaching it from a more rounded and morphological viewpoint, a definition used in a large number of works[2]. This definition assesses rural structures based upon their architectural morphology; but with the understanding that these buildings are probably owned by the elite of rural society or, at the very least, their agents. The defining characteristics for a villa site in this study are relatively simple. Architecturally, consideration as a villa site requires rectangular construction in stone, or partially in stone, as a primary element. This form of construction must however be combined with monumentalising architectural elements such as porticos, verandas, ornamental pools, courtyards and monumental approaches with a minimum number of small rooms. These buildings must additionally demonstrate some combination of non-functional or luxury internal features through the presence of hypocausts, interior décor, baths and sometimes mosaics, tessellated pavements and luxury decoration such as marble, statuary and fountains.

These buildings are usually part of an estate centre, consisting of a monumentalising main house and a series of ancillary production, storage and processing structures. The structures are sometimes physically connected to the main house through a separate wing but, alternatively, can be standalone structures within a nucleated settlement. In short, the villa is being defined as the main house of an estate centre, of which one building or more must demonstrate some form of additional non-functional features indi-

[1] Rivet 1969, 178-182; Percival 1976, 119-144; *cf.* Slofstra and Brandt 1983, 87

[2] For example Hingley 1989, 2-4; Van Ossel 1992, 39-44; Lewit 2001, 260; Heimberg 2002/2003, 68-69; Chavarría 2007, 32-36

cating a degree of investment of surplus disposable capital into landed assets (Hingley 1989, 45-46). This level of investment automatically indicates that these structures are the preserve of the wealthier classes of society and this project will adhere to this by assuming that the villa was the residence of elite members of society and their agents.

Related to this are two other terms, which are key to this project and defined within its framework. The ***villa landscape*** is an environment in which villas dominate both socio-economic life and the physical fabric. It refers not just to the numerical superiority of villa sites but also the perception of these structures by local rural populations (Roymans 1996, 61; Roymans and Derks 2011, 3). This is opposed to a ***non-villa landscape***, an environment in which pre-existing forms of occupation constitute the majority of rural sites. This implies a more traditional form of landscape organisation and settlement hierarchy, although this does not preclude the presence of an occasional villa or cluster of villas.

1.3.2 VILLA TRANSFORMATION AND THE APPEARANCE OF SQUATTER STRUCTURES

The term ***villa transformation*** refers to the archaeologically visible changes in the physical fabric of the Roman villa during Late Antiquity (Petts 1997, 102-103; Christie 2004, 8-27). Despite its ubiquitous use, the term is unwieldy and comparatively ill-defined. The phrase has generally been applied to a wide range of functional and occupational changes visible at villas from the 3rd century onwards, representing a nuanced evolution of the phrase 'squatter occupation' (Gerrard 2013, 165). 'Squatter structures' are often poorly constructed with high-status elements frequently disregarded or altered during the process of more recent productive and 'messy' occupation (Petts 1997, 103-105; Lewit 2001, 261-262; Lewit 2003, 251-252). Consequently, they have been dismissed as 'campements', 'habitats de type précaire', 'cabanne', or, in English, described as 'squatter occupation' (Wheeler and Wheeler 1936, 206; Rascón *et al* 1990, 197).

Consequently, these 'squatter' features have been dismissed as appearing to demonstrate the apparent dispensation with elements of *Romanitas* in favour of the reorganisation of habitational and productive space. The loaded terms traditionally used to describe transformation will not be used in this study; instead, the terms 'transformation' or 'mutation' will be employed to refer to these changes and appearance of new features. The transformation and abandonment of Roman villas consists of three broad, overarching elements. These elements are rarely formally defined and have been implicitly applied in other studies without clear parameters for their meanings. ***Reuse*** has been used to describe the phenomenon of later activities at villa sites without thought to its original meaning. However, it is defined here as the basic reutilisation of buildings and their facilities as a single event. ***Reoccupation*** is related to this and builds on the definition of reuse by extending it to the *repeated* use of structures by inhabitants living *onsite*. Finally, ***altered function*** simply refers to the reoccupation or reuse of buildings for purposes others than originally intended. These elements include a wide variety of types of activity, sometimes extremely archaeologically clear but sometimes only slightly so, often activity must be necessarily inferred from very little evidence.

1.3.3 MIGRATION AND THE VÖLKERWANDERUNGSZEIT

Each of the research areas laid out in section 1.5 were subjected to varying degrees of disruption during the *Völkerwanderungszeit*, or Migration Period. There is significant debate over the scale of these migrations and the size of the populations involved (Heather 2009, 161-173; Halsall 2007, 10-19; 2012, 31-34). These issues have generally been couched in terms of either outside influences of migrating

groups moving into the empire and bringing it to an end (*cf.* Heather 2009, 30-33) or internal breakdown followed by immigration (Halsall 2007). Despite these somewhat thorny issues, it is clear that immigrant populations had a significant effect upon the transformation of villa landscapes. The presence of so-called 'Germanic' material culture (Chavarría 2004, 74-75; Heeren 2017, 160-168) and cemeteries with individuals of 'Germanic' origin (Halsall 1995; Halsall 2000, 177-180) suggests some element of interaction by incomers with the rural environment, given the significant evidence of the reuse of the Roman rural fabric by immigrants (Farnoux 1995; Van Ossel and Ouzoulias 2000, 149-150). This study will add to the body of work by assessing the role of migrants on villa sites through the archaeological evidence. This approach looks at the presence of so-called 'Germanic' finds, domestic architecture and the formation of mixed material culture and assesses them within relation to each other, rather than in isolation (for example recent work in Theuws 2009; Heeren 2016; Heeren and Roymans 2018 on Late Antique funerary traditions in Northwestern Europe). The method behind this, applied in this current study, quantifying the presence of such material across regions and contextualising migrant presence at villa sites is set out within the framework in Chapter 2.

The movement of people from outside the empire into the provinces had been occurring since the Republic (Halsall 2007, 148); however, the scale of this had been increasing since the 3rd century AD. This is however difficult to prove; archaeologically it is almost invisible yet is recorded in the historical sources (Halsall 1995, 26-27). The tension between the historical and archaeological sources has deeply influenced the contextualisation and discussion of migration in the Late Antique world. Widespread rural dislocation appears to have occurred in Northern Gaul during the late 3rd century (Van Ossel and Ouzoulias 2000, 136-138; Vos 2009, 203-208; Heeren 2017, 155-156). The abandonment of the countryside has been associated with the temporary collapse of the Lower Germanic *limes* in the second half of the 3rd century AD; the *limes* appears then to have been stabilised under the Tetrarchy (Heeren 2016, 203-204). Widespread migration, however, begins with the entry of the Goths into *Moesia* in 376 (Heather 2009, 145) possibly prompted by pressure from populations moving off the Eurasian Steppe, in particular the Huns (Heather 2009, 269-275). It culminates in the breakdown of the Roman *limes* on the Rhine in 405-406 with warbands of Vandals, Alans and Suebi penetrating into Gaul (Heather 1991, 199-213; Kulikowski 2000, 325-345). The movement of semi-autonomous groups into the empire, often without imperial oversight, led to the development of the Early Medieval kingdoms, with Franks settling in Northeastern Gaul (De Boone 1954; Willems 1984; Heeren 2017, 158-160 to name a few examples) and eventually forming the nucleus of the Merovingian Kingdom (Dierkens and Périn 2001). The Visigoths established a federate kingdom in Aquitania in 418/419 (Burgess 1992, 43-44) and rapidly expanded into *Narbonensis* and *Hispania*, eventually being pushed south of the Pyrenees permanently (Wickham 2007, 44-45). Vandals, Suebi and Alans, who had crossed the Rhine in the early 5th century, moved into Spain; eventually crossing to Africa in the middle of the 5th century (Arce 1982; Ripoll and Velázquez 1995). Migrations also affected the North Sea region, with Anglo-Saxon groups moving into the rapidly de-Romanising former diocese of *Britannia* (Gerrard 2013, 260-272).

The archaeological and historical debates surrounding this are difficult, acrimonious and rooted in long-term theoretical developments within the field. Identity is a key word is assessing the impact, scale and interaction of migrants moving into the Roman Empire during the *Völkerwanderungszeit*. Despite the popularity of the word 'identity', definitions of this term are somewhat hard to find. Referrals have been made including everything from self-identity to group identity in the literature (Dìaz-Andreu and Lucy 2005, 2-3). When addressing the topic of this study, it invariably applies to the complex discussions surrounding ethnicity and identity of burial groups in the Late Roman and Early Medieval Periods.

The traditional view of ethnicity and identity: that of an unchanging ethno-linguistic population, rooted in pre-war racist constructs and primarily pioneered by German archaeologists (Kossinna 1911; 1936; Leo Klejn 1974 for a summary), was by the 1950s, considered highly problematic (Preidel 1952). This backlash, partly driven by an uncomfortable relationship with the racial policies of Nazi Germany,

firmly dispensed with the concept of ethnic units, initially towards ignoring ethnic identity in favour of a more processual approach (for example, Geary 1983). The key reassessment of the role of ethnicity and identity and the re-examination of ethnic constructs was Wenskus' publication of *Stammesbildung und Verfassung* (1961). Wenskus argued for a re-evaluation of Germanic tribal groups and postulated that they were formed of multi-ethnic groups, tied to an elite group or individual leader. The social processes behind his hypothesis rested on the *traditionskern*: a group of traditions and rituals developed by the elite and royalty in order to successfully bind the multi-ethnic and perhaps multi-lingual elements of the *gens*.

This long lasting approach has been further developed in the last 50 years and stands now as an important part of the debate on ethnic identity in Late Antiquity and the Early Medieval Period (Wolfram 1979; Pohl 1987). The debate has moved on significantly since Wenskus' landmark publication and a large-scale broad conceptual approach has developed around his initial ideas: ethnogenesis (Pohl 1991; Pohl 1998 for summaries). Ethnogenesis is a developed form of the *traditionskern* theory, in which traditions, rituals and political-cultural identification must be repeatedly reaffirmed by elites groups, especially in the rapidly changing conditions such as the establishment of the *foederati* kingdoms of the 5th century (for example, the methods put forward in Härke 2011 for the Anglo-Saxons). These polyethnic units were marked by a reoccurring and constant process of ethnic self-identification and redefinition (for example, the origin myths detailed in Pohl 2018; Brown 1998), which in time, came to include Romanised elites and populations within the transforming provinces, although there is some significant critique of this, especially considering the role of military success and violent action in group formation (Gillett 2006). Scholarship broadly accepts some of these tenets and it is now widespread belief that the ethno-linguistic Germanic *gentes* were inherently unstable (Goetz 2002, 4).

Despite this apparent conformity in views of the development of ethnic constructs in the Early Medieval period, there is an opposing school of thought. There is a strong draw towards archaeological identification of ethnic groups, somewhat in the tradition of Kossinna but divorced from the nationalist and racist overtones (see Fehr 2002). Various works, spanning a large swath of the former Western Empire have identified ethnicity through material culture and burial practice (*cf.* Halsall 2011). This school, pioneered by a range of German and French specialists primarily has used Merovingian Gaul and Visigothic Spain as testing grounds for applying an ethnic analysis of migrating populations (Bierbrauer 1994; Kazanski and Périn 2008; 2006). Although many of these arguments claim methodological purity based on a reading of the archaeological sources, this is a difficult to impossible claim to make (Halsall 2011, 18-19) and a critique of this, although highly inflammatory, has demonstrated the difficulty of applying ethno-linguistic units to archaeological data (Brather 2004 and Bierbrauer 2004 for the response).

This study naturally must engage with these debates in that it covers the migration period in detail and there is evidence of non-Roman interaction with transforming villa sites (the archaeological evidence for this is laid out in section 2.5.6). In essence the study takes a middle like between the two diametrically opposed camps. It fully accepts the ethnogenesis theories of the Vienna School whilst assuming that these groups, or at least the elites of these groups, are visible within both the burial record and in interactions with transforming villas, especially in regions where there is little or no evidence for a previous Roman phase, for example the northern reaches of *Germania Secunda*.

1.3.4 LOCAL, REGIONAL OR LONG-DISTANCE?

Three further terms: *local*, *regional* and *long-distance* (or *inter-regional*) are employed in this study to help build a coherent picture of transformation at villa sites and their socio-economic histories. These three terms have a long history in archaeological theory (Fox 1923; Crawford 1929; *cf.* Galaty 2005, 292-297) and have been repeatedly used to illustrate social and economic exchange across diverse human occupied landscapes. There has been repeatedly analysis of the meanings of these terms and their impact upon our

understanding of past landscapes and societies (Kantner 2008 for a summary). This study has dispensed with previous conceptual frameworks, many of which are contradictory and erratic in favour of new, clear definitions.

The ***local*** is here identified as a site, its surrounding *territorium*, subsidiary sites, such as estate structures. This includes, for the context of the villa landscape, the estate boundaries of a given villa's landholding. The local environment also includes the surrounding estates and sites that are able to act within a given network of small-scale, short-distance resource movement and exchange.

The next level is ***regional***. The regional level groups a large amount of local level units into a larger, integrated geographical unit. Naturally, regional analytics incorporates both geological, geographical and arbitrary boundaries into assessing the size and scope of a region. The loess belt is a key example of this. The geological soil belt runs from Western Wallonia to the German Rhineland, containing thousands of archaeological sites. Although the geological aspects of this would suggest its grouping as one distinct region, this is far too impractical for effective archaeological investigation. Instead, it more feasible to break the region down into three units: the German, Dutch and Belgian loess regions. Socio-economically, these regions are middle-sized and can be viewed as economically, political and socially united, with an ability to consume and produce goods in a demonstrable and measurable way.

The highest level of interaction within the scope of this study is ***long-distance***, or ***inter-regional***. The movement of resources and people between regions are key to understanding migration and large-scale cycles in the Late Roman rural economy. Defining this term is therefore important in this study, which primarily looks at different regional trajectories. Long-distance is defined as the social, consumptive and productive interaction between different regions. These regions do not necessarily need to be located next to one another, for example, the flow of goods in a system can be produced in one region, transitory in another and consumed in a third. This assessment allows a clear definition of long-distance and ties it into the wider hierarchy of interaction laid out in this section.

1.4 THEORETICAL FRAMEWORK

1.4.1 TRANSFORMATIONS OF THE LATE ANTIQUE WORLD

The transformation of the Roman world has long been a field of intensive study (Gibbon 1789; Lot 1931; Ward-Perkins 2005; Christie 2004; Goldsworthy 2006; Esmonde Cleary 2013). Consequently, there is a vast amount of literature concerning the decline and fall of Rome, encompassing a wide range of theoretical frameworks and concepts. These range from studies arguing that the Christianisation of the empire eroded the moral fibre of the army, to those arguing that Rome never fell at all (*cf.* Goldworthy 2006, 11-12). Academically, the study of the Late Antique world has gone through two very broad trends. The oldest of these frameworks is the Gibbonist narrative of 'Decline and Fall'. This linear, teleological approach takes the 1st and 2nd century empire as a point of reference and states that the declining and decaying empire of later centuries, riven by socio-economic unrest and political instability, was overrun by migrating barbarians from beyond the frontiers. This period is often painted in the darkest terms, with hordes of migrating barbarians burning and pillaging their way through the landscape. The 'failure' of the empire was generally seen as a 'bad thing' (*cf.* Wickham 2007, 7), ushering in the Dark Ages, tempered only by the view that Late Antiquity was itself a step down from the heights of Classical Civilisation. This viewpoint differed from country to country with different elements stressed in different places. German literature, especially in the pre-war period, tended to stress uncomfortable notions of the racial superiority of the 'Germanic' tribes (Kossinna 1936 for example), whilst British literature emphasised the establishment of England, and French literature painted the end of Roman rule in the darkest possible terms (Lot 1931; Grenier 1934). These broadly allied narratives were profoundly influenced by the first

major work on the period: Edward Gibbon's *History of the Decline and Fall of the Roman Empire*. This moralising and pessimistic account, published between 1776 and 1788, sets the tone for discourse on the demise of the Roman Empire over two centuries and marks the genesis of the traditional approach to Late Antiquity (*cf.* Lewit 2001, 33-34). This approach was coupled with a cosy imperialist worldview in the 19th century and resulted in the study of Late Antiquity being squeezed between the classical world and the overtly nationalist creation-myths of the modern European nation-states (Heather 2009, 31-37).

This overtly biased account, often presented in terms of mono-causal explanations, characterised studies of Late Antiquity throughout the 19th and 20th centuries and was commonplace into the 1970s and 1980s. The end of the empire was painted in terms of 'crisis' and 'catastrophe' (Rostovtzeff 1926; Frere 1967; Piganiol 1972), with Rome suffering from *'les formes multiple d'une crise possible: politique, économique, religeuse et morale'* (Rémondon 1964, 71) and the barbarian invasions termed '*La Tormente*' (Gorges 1979, 43-45). Theoretical models of the *Völkerwanderungszeit* have traditionally stressed the movement of entire peoples into Western Europe (Lot 1931; *cf.* Heather 2009, 31-37). This migration has been stressed as violent and destructive, with waves of immigrants dismantling Roman society (Piganiol 1972, 457-466; Gorges 1979, 47). Barbarian raiding has been seen as a convenient driver for more fundamental changes within the economic and social sphere (Webster 1969, 223-230; *cf.* Branigan 1971, 115-116; *cf.* 1972a, 120-121). Comments on Late Antiquity tended to be depressed postscripts or broad-brush overviews, with little critical analysis beyond the entrenched preconceptions. It was viewed as a means of explaining why the classical world failed or, in the context of a proto-feudalistic society developing into that of the medieval period.

Much of the early work on the subject has leant heavily on the literary sources, due to the dearth of archaeological evidence. This approach continued throughout the 20th century, as archaeology was repeatedly been employed only to support this historicising account. Destruction layers at sites were assumed to be of violent origin and supported the assertion of barbarian invasions. Destructions at many classes of site were associated with specific barbarian incursions in the Germanic Provinces (*cf.* Heeren 2016, 189-191), France (Grenier 1934, 898-950; *cf.* Van Ossel and Ouzoulias 2000, 133-134), Britain, (Webster 1969, 223-230) and most notably in Spain, where this approach persisted until the end of the 20th century (Almedia 1977; Gonzalbes 1986; Carrillero *et al*. 1995). The process of coin hoarding was used to support this with many finds dismissed as a product of instability, buried in times of conflict and not recovered (*cf.* Painter 1977; Cahn and Kaufmann-Heinimann 1984; Reece 1988) or viewed as plunder gone missing as raiders returned across the frontiers (Künzl 1993). Terminating coin lists at sites and in hoards were used as proof of a *terminus post quem* and in many cases; they served as irrefutable proof for destruction or abandonment (*cf.* Heeren 2016, 193-196). This view of instability, civil disruption and invasion has had a long-term appeal to scholarship and the dark picture of the Late Roman world (Perowne 1966, 156; Gorges 1979, 43-45) has inevitably blinded the study of other elements of the Late Antique world.

The intellectual and political changes of the late 20th century overturned many of the earlier preconceptions on Late Antiquity. Academic focus has shifted towards a more holistic approach with traditional points of view firmly rejected in favour of a more nuanced view of the past. This new approach was pioneered during the early 1970s (Brown 1971; 1978) and frames Late Antiquity as a period within its own right with dynamic socio-economic and cultural norms; and we can now speak of a 'transformation of the Roman world' narrative. The older, more biased vocabulary has given way to more neutral phrasing; 'transitional', 'continuity and discontinuity' and 'transformational' are now commonly employed in descriptions of the period. This is in no small part due to the internationalisation of academia, with *The Transformation of the Roman World* program in the 1990s approaching the subject from an interdisciplinary focus and going some way to overhauling the previous academic consensus (Wickham 2005; Halsall 2007; Heather 2009; De Jong 2018).

Scholarship has increasingly begun to place emphasis on different social norms. The importance of an alternative cultural *milieu* (Heather 2009, 182-186), centred on 'Germanic' Europe, has been stressed; with

the older terms 'centre' and 'periphery' and the associated centrality of Mediterranean culture rejected (Van Dam 1992; Heather 2009, 186-193). Regional variations have been emphasised (Rind 2015; Esmonde Cleary 2017) and the diversity of culture within the empire brought under study (Mattingly 2011). Attention has been paid to the changing use of social space both rurally (Petts 1997; Lewit 2003; 2005), where there is clear evidence for radical renegotiations of activity; and within the urban environment, where social space was Christianised (Liebeschuetz 2001, 151-165) and more utilitarian habitations developed (Ellis 1988). The new approach stressed elements of continuity between the Roman and post-Roman worlds. Socio-economic stability and unity between the empire and the successor states (Wickham 2010) has been highlighted, with the continued adoption of Roman cultural norms (Gerrard 2007; Frere and Wilts 2011) explored within this more accommodating framework. Excavation data has been re-evaluated, demonstrating that many destruction layers cannot be dated, nor are they as widespread as initially believed (Kulikowski 2004, 151-170). The construction of alternative buildings or reuse of buildings are evaluated without biased preconceptions of 'decline' (Corbishley *et al*. 1997; Maloney and Hale 1996), with abandonment phases examined in detail (Van Ossel 1996; Heeren 2015). The decline of 'Gibbonism' (Lewit 2001, 34-36) has directly encouraged studies engaging with the end of the empire, without resorting to overly simplistic models of decline, decay and invasion (Esmonde Cleary 1989; Van Ossel 1992; Dark 2000; Gerrard 2013).

This new orthodoxy has been widely embraced across Northern Europe, albeit with some resistance in Spain and Italy, where longer held biases have not yet been rooted out (Lewit 2001, 34). Some studies have gone too far in denying the existence of radical, sometimes highly violent and far-reaching change, glossing over elements of discontinuity (*cf.* Heather 2009, 334-335). One notable study describes the end of the Western Empire as '*an imaginative experiment that got a little out of hand*' (Goffart 1980, 129-130). In reaction to this, some scholarship has returned to a more traditional vein incorporating previous elements of the model of decline and fall (Ward-Perkins 2005; Heather 2005; Goldsworthy 2006).

1.4.2 THE VILLA RESEARCH CONTEXT

Related to the broad developments sketched above, the investigation of Roman villas has a long and complex history. High-status rural buildings tended to act as focal points for early antiquarian investigations. Most of these excavations were concerned with the discovery of mosaics and the quest for high-status objects (Nicolson and Burnes 1777, 625; Luard 1859; Schuermans 1876; Habets 1895). This long history has exposed vast amounts of archaeology across the western provinces, much of it in poor condition or inadequately recorded. With the development of modern archaeological techniques at the dawn of the 20th century, the excavation of villas has become a source of data upon which to draw. The wide-ranging theoretical shifts in the study of Late Antiquity have had a profound effect upon excavation and analysis of villa landscapes. The older research tradition influenced excavation and analysis into the 1990s and has detrimentally affected studies of the end of villa landscapes (*cf.* Lewit and Chavarría 2004, 3-4). Excavation reports tend to be highly biased in favour of the analysis of earlier material of the Republican, 1st and 2nd centuries AD and they employ loaded language to describe rural transformation or abandonment deposits in Late Antiquity. Such language utilises phrases such as 'type de habitat précaire', 'wretched' and 'rude' to describe Late Roman and post-Roman deposits (*cf.* Lewit 2005, 254; *cf.* Mattingly 2007, 534). These terms are usually covered by the overarching and highly biased term, 'squatting'. These unhelpful designations do little to further the understanding of the processes behind transformation and display a deep, institutionalised bias underpinning the study of abandonment phases.

It is worth noting that the same types of phrasing have been applied to the reuse, abandonment or conversion of buildings in other cultural contexts. Occupation at various sites in Post-Amarna, 2nd and 3rd Intermediate Period Egypt (Peet and Woolley 1923; Lacovara 1990; Lesko 1994), has been catego-

rised as 'squatters' reoccupying high-status sites. The same terminology has been applied to the varying forms of reoccupation of Late Bronze Age sites in Greece during the Sub-Minoan and Post-Palatial periods (Deger-Jalkotzy 2008, 390-392, 396-398; Catling 2009), as well as Early Iron Age occupation in the Near East (Stronach and Roaf 2007; Bryce 2012). Reuse of ruins has also been viewed through the same lens; post-146 BC Corinth (Darrow 1906, 74-75) and Post-Classical Maya (*cf.* Stanton and Magnoni 2008) have both been contextualized as 'squatting'. This type of approach, originating in now discredited theories rooted in 19th century imperialism, has blighted the study of economic and social stress in many cultures and has reflected poorly on our understanding of final-phase occupation at many sites.

Evidence at individual sites has suffered from this disparaging bias. There are serious deficits in the later stratigraphy of sites (Kirk and Corder 1932; Liversidge, Smith, Stead and Rigby 1973; Sánchez 1997); with later material often ignored wholesale or cleared off without extensive recording, as it is sacrificed in the search for high-status remains (Hettner 1893; Payne 1897; Koethe 1940). Where recording has taken place, many features have suffered from extremely vague descriptions; especially in the description of poorly dated habitational features, such as subdivision of walls or occupation debris (Wilson *et al.* 1974; Ortego 1977; García Gelabert and García Díez 1997) and non-identifiable burials (Wright 1941; Nash-Williams 1953).

This issue has been further compounded by a clear historicising agenda. Destruction levels at villa sites have traditionally been associated with historical events and attempts to match up destruction horizons with known barbarian incursions are commonplace. Apparent 4th century destructions in Western *Britannia* have long been associated with the Barbarian Conspiracy of AD 367 (*cf.* Branigan 1971, 115-116; *cf.* 1972a, 120-121). This association is not confined to Britain however, as Spain (Taracena 1950; Ramos Floques 1960; Gorges 1979, 43-45; Blázquez and García Gelabert 1993) and Northern Gaul (Grenier 1934, 890-950; Wightman 1985, 219-222; Agache 1978; *cf.* Van Ossel and Ouzoulias 2000, 133-135) have suffered the same approach. It is, however, now clear that destruction horizons are very difficult to pin down to individual events and re-evaluation of many sites has demonstrated that layers initially identified as destructions may prove to be something entirely different. This approach was supported by the assertion that transformation must be the product of barbarian occupation at these sites. This bias framework fitted into the historicising narrative of decline and fall and aligned with older ideas on the role of the imperial state (Lewit 2001, 34-35). Barbarians are assumed responsible for post-Roman occupation at many sites (Rascón *et al.* 1990, 188-193), with habitation being dismissed as the construction of 'habitations sommaire' and reuse by 'familias visigodas' (García Gelabert and García Díez 1997, 53) or 'Saxon marauders' (Payne 1897, 69).

On a broader level, synthesising studies have done much to support this over-simplified 'decline and fall' worldview. Transformation is brushed over or treated with contempt in many large-scale studies (Frere 1967, 366; Todd 1978; Faulkner 2001, 142-143; Putnam 2007) and couched in very traditional language such as the reversion to a 'lower standard of living' (Webster 1969, 222), or the 'demise of comfort' (Ward-Perkins 2005, 94-95).

The revisionist revolution of the 1970s and 1980s has favourably affected the development of villa studies. This shift has prompted more engagement with the transformation of the villa landscape beginning with Rivet (1969) and Percival (1976) who begin to examine elements of continuity in serious detail. Large regional studies have highlighted the widespread appearance of transformation on a (supra)-regional level from the 3rd century onwards (Van Ossel 1992; Chavarría 2007; Gandini 2008; Dodd 2014) and it is now possible to say that every part of the Roman West was affected by this change. Work has been done to begin to unravel the bias evident in previous literature and rehabilitate the phrase 'squatting' within the archaeological record (Lewit 1991; Petts 1997; Christie 2004). The methodological framework for this rehabilitation is steadily taking shape, with theoretical studies developing new contextual themes (Van Ossel and Ouzoulias 2000, Chavarría 2004, Lewit and Chavarría 2004). Petts (1997) and Lewit (2005) have concluded that the phenomenon represents the reorganisation of

personal and social space within the villa in the Roman West during the 4th and 5th century, in the light of increasingly irrelevant Roman social etiquette, as the need and desire for displays of opulent and ostentatious cultural homogeneity amongst members of villa-owning elite declined. Ellis (1988) has broadly supported this theme, arguing for a dramatic shift in occupation patterns showing the transitional nature of Late Antiquity, in which the classical peristyle house fell out of use and was abandoned in favour of styles that are more egalitarian. This manifested itself through the subdivision of rooms and the use of former high-status rooms for utilitarian functions (Munro 2012). Many of Ellis' case studies come from the Eastern Empire where other factors, not present in the West, are at play in the changing *milieu* of Late Antiquity, primarily 'soukification' (Ladstätter and Pülz 2007). Ellis also draws attention to the existence of a growing inequality of habitation; a small number of buildings showing overwhelming surplus investment whilst others show evidence of mutation. This is a trend also visible in 4th century Spain (Chavarría 2004) and perhaps in *Britannia* (Dark 2004).

Much energy has been applied to understanding the Christianisation of the villa landscape, early studies noting the clear correlation between villa sites and religious structures (Percival 1976; 1992; 1997; Cantino Wataghin 1998), whilst further work has demonstrated continuity between the Roman structures and medieval churches (Bowes 2002; Bell 2005; Chavarría 2005; 2007; 2010). This has been supported by work done on funerary transformation; with analysis of the reuse of villas for funerary purposes (Le Maho 1994; Lewit 2005; Dodd 2020) and some of the thornier aspects of 'Germanic' cemeteries at these sites considered in detail (Lucas and Viňas 1977; Halsall 1995; Chavarría 2004).

A key theme to the new approach has been the search for continuity between the Roman and Medieval periods. Surviving villas have been seen as key focal points within the rural landscape of the Early Middle Ages (Percival 1976, 31, 172; Agache 1978, 436), regulating and providing a market economy for the purchase and disposal of commodities. The majority of scholarship now examines the villa landscape through a more holistic framework; viewing the end of the villa environment as a long-term phenomenon (Esmonde Cleary 1989, 134), influenced by structural economics as well as social issues and an appreciation that it is part of a wider transformation of socio-economic display (Gerrard 2013, 118-156). It is worth noting that the same types of features are archaeologically visible in other forms of settlement. The urban environment undergoes the same forms of change in the Late Empire and Early Medieval period through the 'dark-earth' phenomenon in Britain and *étiage* in Gaul and Germany and *transformación* in Spain, with wooden constructions and buildings which would have been characterised as 'habitats sommaire', had they been uncovered in the countryside. The prime example of this are the wooden constructions in the ruins of the Basilica Baths at Wroxeter (Corbishley *et al.* 1997). These types of changes also appear at military sites with a large wooden hall-like structure constructed over the *horrea* at Birdoswald (Wilmott 1997, 203-224) and industrial transformations in military buildings at Vindolanda and Housesteads (Collins 2017, 213). The same is true of religious structures, where temples are converted into churches; and there is evidence of the reuse of rural temples for other purposes (Rahtz and Harris 1958; Henrich 2010). This parallel type of occupation, however, is never viewed in the disparaging tradition that has plagued studies of villa transformation.

The growth of interest and engagement with this phenomenon on a theoretical level has had a knock-on effect on excavation. The recording of Late Roman rural sites has seen an upsurge in quality and quantity in the last thirty years; partly due to the introduction of new recording techniques, especially in Britain (MOLAS 1980). With the advent of developer-funded archaeology across Europe, it is now also possible to examine often fully excavated sites within the landscape. When coupled with the changing academic focus, this has created a vast archive of data, which is of great use to the Roman rural archaeologist.

1.5 SPATIAL AND TEMPORAL OVERVIEW

This section deals with a broad introduction to the spatial and temporal basis for this study. It details the spatial scope, with a brief historical and geographical introduction to each area, whilst also elaborating on the chronology of the period under study.

1.5.1 SPATIAL FRAMEWORK

This project encompasses a vast area of the Roman West, covering regions of seven modern countries. The three regions under study are geologically, geographically and climatically highly diverse (figure 1.1). On a general level, they can be divided into two distinct zones, a temperate northern region consisting of Britain, Benelux, the Rhineland and Northern France, separated from a Mediterranean zone including Southern France and Northeast Spain. Each zone has a diverse villa landscape with differing rural occupation and land use patterns.

The three regions under examination here have been chosen for a two broad reasons: geographic and cultural-historical. On a geographical level, they present examples of the two primary forms of climatic and landscape variations present in the Western Roman Empire. The northern zone comprises a temperate belt and the southern zone presents a Mediterranean climate and landscape. This provides an important contrast and directly affects the settlement type, focus and trajectories within these regions. The geographical regions in this study therefore give an important widespread of land-uses, climatic variations and landscapes from which comparative analyses can be made.

The second reason is cultural-historical. Each of these regions provides a unique viewpoint into the different processes affecting the Latin West from the late 3rd century onwards. Britain, as an island, experiences a unique trajectory, relatively untouched by political instability and migration until the 5th century whilst Northern Gaul underwent significant upheaval. The widespread abandonment of settlements and the depopulation of the region north of the Cologne-Bavay road, coupled with written sources and archaeological evidence for migration present a different socio-cultural and historical case study. The southern study zone further presents a different picture. Southern Gaul and Northeast *Hispania* take a largely different cultural and historical trajectory, divorced from the socio-economic system of which both Northern Gaul and Britain were components. Settlement dynamics and historical events, especially interactions with Italy and Africa, were highly integrated into the Mediterranean economy. This again offers a different picture with a settlement pattern highly dependent upon production and less dependent on the consumptive patterns of the army on Hadrian's Wall or the Rhine *limes*. The role, scope and implications of migration in this landscape are also highly debatable and demonstrate a completely different archaeological reality to the northern study zone. This diachronic division between north and south neatly bridges the gap between the periphery and the core provinces of the Western Roman Empire.

1.5.1A: NORTHWESTERN STUDY ZONE

The northern study region has a temperate maritime climate with mild, seasonal variation. This variation becomes more marked inland as the environment transitions to a more continental climate in the southeast. The northern region was cooling slightly during the period under study, as the Roman Warm Period came to an end in the middle of the 3rd century (McDermott, Mattey and Hawkesworth 2001; Büntigen *et al.* 2016). Higher concentrations of woodland were present in parts of Northern France and Britain whilst there was a far larger area of wetland present in the Low Countries. The effects of the Dunkirk II marine transgression affected this, rendering large areas of the littoral fringe unavailable to exploitation

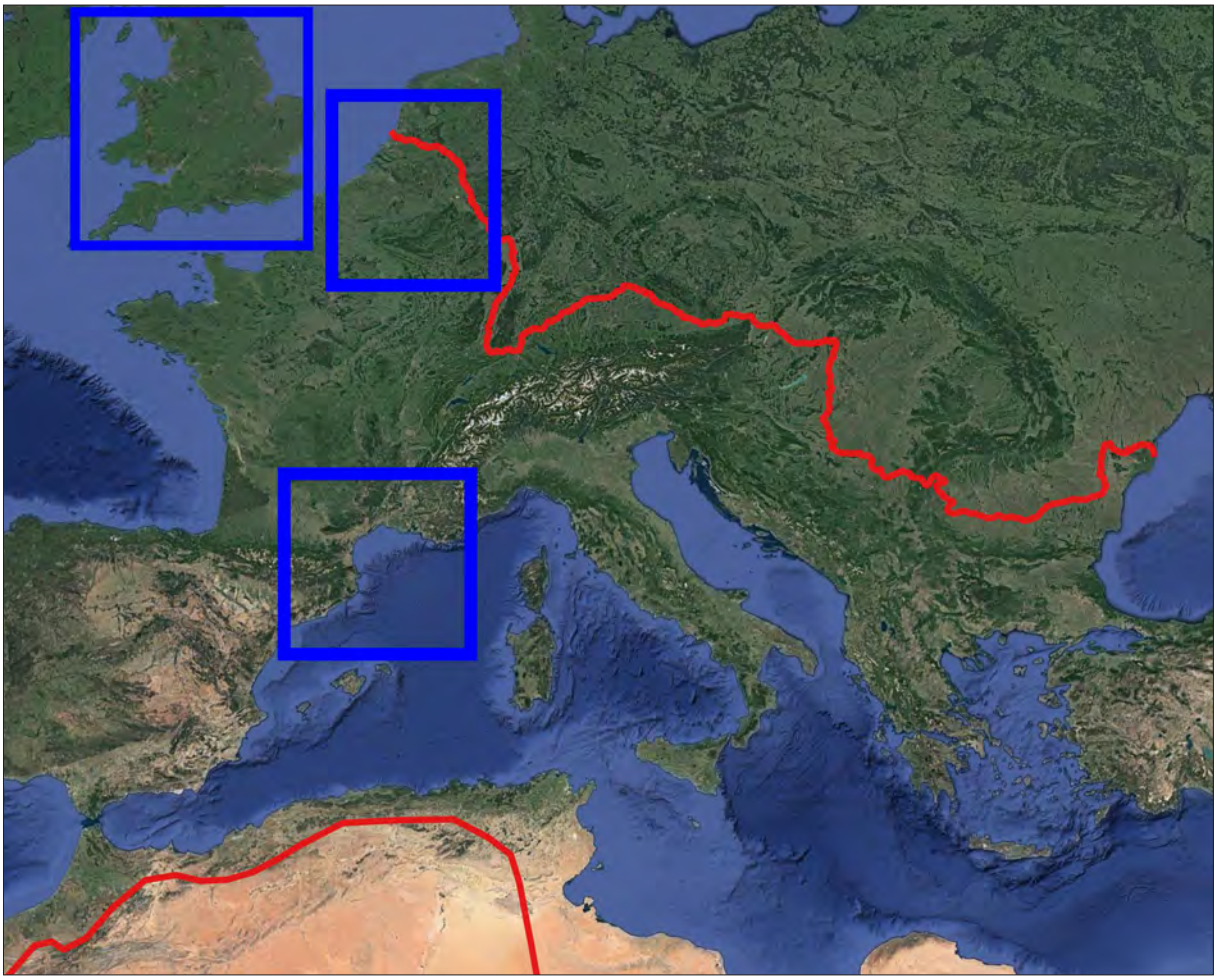

Fig. 1.1: Elevation map of the European Continent highlighting study areas in blue (J. Dodd).

or habitation (Brandt, Van der Leeuw and Van Wijngaarden-Bakker 1984; Jansma *et al.* 2014), although its impact is somewhat debated. In this study zone, two distinct areas have been selected, *Britannia* and *Gallia Belgica* and the two Germanic provinces.

1.5.1a.i: Britannia

The British Isles consist of a mixture of upland and lowland terrain. The south and east of the diocese comprise a fertile arable landscape. The north and west is generally higher, with poorer fertility and higher rainfall. The three areas of *Britannia* under study are significantly different in geographical terms; the southeast consists of fertile Cretaceous greensand and chalk, although much of the area was not subjected to intensive agriculture. The north comprises primarily upland terrain made up of Permian and Triassic limestone, with later Tertiary agglomerations. The more fertile areas of Holocene clays are generally concentrated in the east of the region. The southwest comprises a highly fragmented mix of Jurassic Oolitic and Carboniferous limestones, Devonian and Silurian greywacke. The fertile areas of Somerset are generally concentrated around the marl landscapes (Toghill 2000, 123-124). The littoral zones of the North Sea coastline suffered some transgressions as a part of the wider Dunkirk II event (Greensmith and Tucker 1973) and this may have disrupted cultivation patterns in Kent, East Anglia and Yorkshire.

Fig. 1.2: A map of the northwestern study zone showing the regional study boundaries and the *limes* (J. Dodd).

The villa landscapes were primarily situated in the south and east with large outlying groups in modern day Somerset and Dorset around the centres of Bath and Cirencester, with a smaller group of settlements in the Vale of York. Occupation in the upland zone was characterised by non-villa settlements. The north of the province was highly militarised, and this may account for the lack of developed villa landscapes in some of the more fertile areas of Northern England. The three regions of *Britannia* were chosen in order to provide a balanced view of the Roman diocese without overstretching the ambition of this project. The central section of the Roman diocese was a step too far for data collection and the analysis of three separate regions was considered enough to provide a broad overview of the regional trend and allow for a critical mass of data to compare with the situation in other provinces.

1.5.1a.ii: Germania Secunda and the Belgic hinterland

The large landmass between the Rhine, the Seine and the North Sea comprises a diverse set of landscapes. The north and east were dominated by Pleistocene sand, Holocene clays and were partly comprised of a wetland landscape (Pierik 2017, 14-21). The peat bogs of the northwestern part of this area, in what is now the Southern and Western Netherlands, were largely uninhabited in the Late Roman Period with evidence of continued transgressions on the littoral fringes (Louwe Kooijmans 1980, 106-133). South of this, the Meuse-Demer-Scheldt (MDS) region was suited to habitation, although less fertile than the loess landscapes to the south and southeast. This zone of highly fertile loess soils was the most intensely occupied landscape in the region. South of this, bordering the southwestern side of the study, lies the northern half of the Paris Basin, an area of primarily Triassic formations (Dercourt 2002), arbitrarily truncated by the River Seine for the purposes of this study. On the southern boundary of the

study region (in modern-day France, Luxemburg and Belgium) is the Ardennes-Eifel massif, a mountainous area of Devonian limestone and slate.

The region's villa landscapes are concentrated in the loess belt between Bavay and Cologne, extending into the Paris Basin. The northern littoral and sand zones tend to be occupied by non-villa habitation patterns with villas a rarity (Roymans 1996; De Clercq 2011; Roymans and Derks 2011, fig. 1). The highland areas of the Ardennes-Eifel Massif were not overly Romanised, as villa occupation was generally confined to a number of river valleys. Occupation in this highly forested region was sparse, with other forms of landscape exploitation common.

1.5.1B: MEDITERRANEAN STUDY ZONE

The southern study region is vastly different to the northern zones. Southern Europe has a Mediterranean climate, characterised by dry, hot summers and mild, moist winters, including a greater degree of climatic variations than the maritime zones to the north. The sub-Atlantic phase seriously affected the region from the 3rd century (McCormick *et al.* 2012), giving rise to warmer winters, more humid conditions (Martín-Puertas *et al.* 2009) and a retracted area of olive cultivation, with climatic cooling evident from the middle of the 5th century onwards. In this zone, two areas were studied, Southern Gaul and Northeast *Tarraconensis*, divided by the Pyrenees Mountains.

1.5.1b.i: Gallia Narbonensis and Northeast Tarraconensis

Gallia Narbonensis is a large zone comprising modern Languedoc-Roussillon and stretches between the Rhône river valley and the French Pyrenees (figure 1.3). The study region includes the fertile western side of the River Rhône, where it runs down from the highland terrain of the Massif Central and its associated Cévennes Mountains and the Pre-Alpine foreland. This enables a fertile belt of land stretching from the coast to the modern city of Lyon to be intensively cultivated, although this study will only deal with the region south of Orange. A wide littoral plain is present along the coast, although in places this is interrupted by marshland and brine filled lagoons known as *étangs*, especially around the Camargue and Petit Camargue, where the Rhône meets the Mediterranean, and the region directly south of Narbonne. This fertile littoral plain gives way to an inland belt of undulating hills and plateaux divided inland by wide river valleys. Inland, the landscape rises towards the Massif des Albères, Pre-Pyrenees and Montagnes Noires. This high ground, comprising a mixture of river valleys, escarpments, foothills and large plateaus, marks the pre-ranges of the Massif Central and the Pyrenees.

Gallia Narbonensis was highly integrated into the socio-economic fabric of the Roman world. There is a high degree of Roman-style material culture penetration into rural settlements (see ARCHEOMEDES project: Fiches 2002; *cf.* Esmonde Cleary 2013, 287). Villa landscapes were clustered along the littoral zones, the Rhône valley and in the undulating hills behind where fertile landscapes allowed for intensive agriculture. The villa was the primary vehicle for the rural economy; however, non-villa landscapes did exist in mountainous or marshy areas where resource exploitation was better suited to different occupation patterns (Badan *et al.* 1995).

South of the Pyrenees, a small region of the large province of *Tarraconensis* was surveyed, corresponding roughly with the modern entity of Catalonia. It stretches from the southern Pre-Pyrenees to the valley of the River Ebro and comprises several distinct topographical zones. Littoral plains stretch along the coastline where the majority of urbanised settlement is situated. This plain is divided into a humid south and a dry north by the influence of the Garraf Massif. The littoral plain is narrow, unlike *Gallia Narbonensis* and quickly rises upwards into two parallel mountain ranges: the Coastal and Pre-Coastal Ranges, which increasingly merge above Tarragona in the Tivissa-Vandellòs Mountains. These ranges act as a climatic buffer for the high tableland inland. This tableland, the Catalan Central Depression, is highly

Fig. 1.3: *Gallia Narbonensis* and Northeast *Tarraconensis* showing the regional study area (J. Dodd).

fertile. It rises towards the north and east, eventually reaching the Pre-Pyenees and widens to the south as it reaches the Ebro Basin, a fertile basin formed by the catchment area of the River Ebro. The Ebro marks the southern boundary of this study.

Tarraconensis was another region with a high degree of integration into the Mediterranean world. Villa settlement was primarily located along the littoral fringe and in the hinterland of the major urban centres, where an important series of surveys have been conducted (Carreté, Keay and Millett 1995; Gurt i Esparraguera and Palet Martinez 2001; Prevosti and Guitart i Duran 2011). Little work has been directed towards establishing the extent of villa landscapes in the region, although it can be assumed that much of the mountainous terrain of the region was dominated by non-villa settlements.

1.5.2: CHRONOLOGICAL FRAMEWORK

This study addresses the phenomenon of transformation within the framework of a *longue dureé* approach covering several centuries. This approach utilises elements of the *Annales* School (Braudel 1972; Bintliff 1991; *cf.* Esmonde Cleary 2013, 7-9) in that it looks at a long temporal period, examining archaeological change over the *moyenne dureé*. The period under study is set within the temporal span of Late Antiquity as roughly defined by Brown (1971) and further established by a large number of overarching studies (for example Jones 1964; Reece 1988; Esmonde Cleary 2013). This period runs between the late 2nd or early 3rd and 7th centuries, with this study choosing the specific dates 235 and 650 as the terms of reference (table 1.1). Despite this broad study period, it must be noted that previous work indicated the deep-rooted nature of rural transformation as early as the late 2nd century (Schneider 2007; Dodd 2014).

This has been developed in tandem with an understanding that a significant number of sites, especially in the Mediterranean littoral, have far longer occupation trajectories, in some cases into the High Medieval Period (Ripoll and Arce 2000, 112-114). Confining this study to the late 4th and 5th centuries, a notable period of intense transformation, would deny the opportunity to study the long-term trends in the rural economy and neglect the warning set out by Esmonde Cleary, nearly 30 years ago, not to restrict our view of transformation by assigning it as a 5th century phenomenon (Esmonde Cleary 1989, 134). The development of the villa landscape earlier than the 3rd century is not examined. It has been covered in detail elsewhere (for example Miret, Sanmartí and Santacana 1991; Habermehl 2014) and therefore is not within the scope of this study. This section sets out a brief historical background to each study region; however, later chapters expand and contextualise the wider chronological framework.

1.5.2a: General overview

This study covers the period from the middle of the 3rd century to the end of the 6th century. This vast time period experienced the initial breakup of the Roman Empire and its transformation into Eastern and Western administrations.

The period begins in the 3rd century, with the Roman Empire united as one political and economic entity. Between the 230s and 280s AD, the Roman world experienced unprecedented and far-reaching upheaval. The dynastic model of the Principate was disrupted at the end of the Severan dynasty, heralding a 50-year period in which officials, primarily army officers, were elevated to the throne (Alföldy 1974 for the contemporary view). This political instability occurred in tandem with widespread economic change: the long-distance trade cycle of the empire went into sharp decline and there is evidence of significant reductions in intra-provincial production and changing consumption patterns (Millett 1990, chapter 7 for example). There is also evidence, in both the coinage and historical sources, of rampant inflation, especially in the 260s and 270s (Callu 1975). Furthermore, the empire faced a range of more severe external threats: in the east, a more organised Persian state, the Sassanid Empire, had replaced the previous Parthian kingdom, whilst on the Rhine and Danube, there is evidence for the coalescing or appearance of new tribal groupings (see Luttwak 1976, 130-154 for a description of the military issues of the 3rd century). External pressure forced the emperor Aurelian to evacuate trans-Danubian *Dacia* between 271 and 275 (Wilkes 2005, 160) and there is a long tradition of assigning rural abandonment phases and the decline of classical urban culture in Northern Gaul to attacks, instability and raiding from outside the empire (Grenier 1934; Agache 1978 for two such examples). This period, traditionally known as the 'third century crisis' is considered the defining transition between Classical and Late Antiquity (Brown 1971, 22).

Some level of stability was restored by the emperor Diocletian, who instigated a system commonly referred to as the 'Tetrarchy'. The coinage base was restored and there was a reorganisation of the military and administrative foundation of the empire, although this process would not be completed until the reign of Constantine the Great (Strobel 2007 on the military development; Corcoran 1996 for the administration). Diocletian shared power with three other colleagues, spread equally throughout the empire, relatively close to frontiers in order to provide a senior commander on site when problems arose. Despite a thorough reform of the administrative, political and military mechanisms of the state, the early 4th century saw a series of destabilising civil wars which destroyed the integrity of the tetrarchy and eventually allowed Constantine the Great to become sole ruler in 324 (Esmonde Cleary 2013, 21). The majority of Diocletian's reforms were maintained: Constantine further reformed the coinage and continued the military reforms, formalising the split between *comitatenses* (field forces) and *limitanei* (stationary frontier forces). This division would last for the rest of Late Roman history (Southern and Dixon 2000, 35-37). Constantine founded a second capital at the former Greek city of Byzantium: Constantinople. This city served as an important political, administrative and economic hub for the Eastern Mediterra-

nean. The empire remained relatively political stable throughout the middle of the 4th century, although there is increasing evidence for disturbances on the frontiers from 350 onwards, especially on the Danube, where groups of Goths were increasingly being settled south of the river, prompting a major conflict in the 370s. This was compounded by major social shifts, beginning with Constantine the Great, there is a significant shift towards Christianity amongst, initially, the urban population. Although this is difficult to assess in terms of scale, it can be argued that by the beginning of the 5th century, much of the population of the Roman Empire, in one form or another, identified as Christian (Esmonde Cleary 2013, 181 for a summary). In 395, the last emperor of a unified empire, Theodosius I died and the empire was split between his surviving sons, Honorius in the West and Arcadius in the East.

The reigns of both these emperors were marked by increased instability and the movement of migrants into the empire. Groups of Goths moved from the Balkans to in Southern France, where they were settled by the imperial government in 418/419 (Burgess 1992, 43-44), whilst groups of barbarians moved into Gaul in 405/406 (Kulikowski 2000, 325-345). This process culminated in the sack of Rome by Alaric the Goth in 410, although by this point, much of the political-military administration was based in Ravenna. The early 5th century also saw the formal loss of control over *Britannia*, which slowly drifted out of official control during the rebellion of Constantine III against Honorius. Constantine III removed much of the British field army to the continent and negotiated *foederati* arrangements with Franks in Lower Germany which effectively took the region out of direct administrative control (Roymans 2017, 66-68 for the coinage evidence for this). This instability increased, with areas such as Northern Gaul and Spain effectively passing out of Roman control into the hands of *foederati* allies or hostile Germanic groups. The most important of these regions was North Africa, which passed into the hands of a hostile Germanic group, the Vandals, in 439. The loss of the grain and tax revenue of the North African provinces left the central government in a precarious state (Wickham 2005, chapter 4 contains a summary of the implications of this). Further destabilisation saw Suebi, Alans and Burgundians establish autonomous kingdoms within the imperial borders, with Visigoths employed to expand their federate kingdom in Spain and Gaul throughout the 440s and 450s, sometimes at the expense of Roman central control (Harries 1992). Further instability was driven by the large multi-ethnic and multi-lingual Hunnic Empire under Attila, who invaded Gaul in 459 (Barnish 1992). By 476, central control was limited to the Italian peninsular and the last emperor, Romulus Augustulus, was deposed by Odoacer, a Roman officer of uncertain barbarian origin. Although some of these western territories would be reconquered by Justinian in the 6th century, the majority of them passed into the hands of the new Germanic kingdoms, with the formal abolition of the title of Western Roman Empire occurring after the death of Julius Nepos in 480 (Grant 1998, 46-47)

1.5.2b: Britannia

Britannia was invaded in AD 43 by the emperor Claudius, following two earlier landings by Julius Caesar in 55 and 54 BC (Millet 1990, 40-47). Over the course of the 1st century AD, the frontier advanced slowly northwards until Boudicca's uprising in AD 60 or 61. Despite this threat to Roman rule, the province continued to expand, reaching its zenith in Scotland under the Flavians in the late 80s (Woolliscroft and Hoffmann 2006, 175-203). In spite of a victory over the Caledonians at Mons Graupius, the frontier retrenched along Hadrian's Wall for the rest of the Roman occupation, notwithstanding some attempts to reconquer Scotland. Britain survived intact from the 3rd century crisis, despite support for the breakaway 'Gallic Empire' and the 'British Emperors', Carausius and Allectus (Frere 1967, 326-328; Goldsworthy 2009, 339-340). The two provinces were radically reorganised under Diocletian and grouped into four provinces (White 2013, 587, Fig. 3), whilst significant, if poorly understood, campaigns were mounted in Scotland (Breeze and Dobson 2000, 234-244). Serious disturbances marked the late 4th century with major crises in 367, 388 and 399 (Collins 2012, 15-16). The diocese was all but abandoned between 407

and 410, following the revolt of Constantine III; with AD 410 considered the traditional date for the end of Roman rule in Britain (Esmonde Cleary 1989, 136-140).

1.5.2c: Germania Secunda and the Belgic Hinterland

Gallia Belgica and the Germanic provinces were politically incorporated in stages. The first phases of incorporation date to Caesar's Gallic Wars, with *Belgica* and the Rhineland being superficially conquered in 57 BC and 55 BC respectively (King 1990, 43-46), although conquest was not achieved without severe resistance (Wolters 1990, 63-65). Further consolidation and advances under the Julio-Claudian emperors across the Rhine ended with the defeat of Varus in the Teutoburger Forest in AD 9 (Wightman 1985, 26-74, 101-134). The Rhine formed the imperial border from the 40s AD until the 3rd century, when serious disruption caused by political instability and external raiding brought about a partial abandonment of the *limes* (Heeren 2016, 203-204). The Rhine was reoccupied under the Tetrarchy and reorganised as part of the wider reforms of Diocletian (De Boone 1954, 58). The river formed the frontier until the early 5th century, although the countryside north of the *Via Belgica* remained largely empty and abandoned (Heeren 2015, 281-283). The region drifted out of Roman control during the collapse of frontier stability in the first decade of the 5th century (Heeren 2017, 164). Frankish groups then achieved some form of legitimacy as *foederati* under Constantine III and later formed the core of the Merovingian Kingdom (James 1988, 51-108).

1.5.2d: Gallia Narbonensis and Northeast Tarraconensis

In contrast with both *Britannia* and *Belgica*, *Gallia Narbonensis* and Northeast *Tarraconensis* came into the Roman orbit very early. Roman interaction with both areas can be traced back to the late 3rd century BC. Northeastern *Tarraconensis* was annexed in the aftermath of the 2nd Punic War (Livy, *History* 30.3.2), with major campaigning in the region throughout the 1st and 2nd centuries BC. Southern France was formally incorporated as the province of *Gallia Narbonensis* in 121 BC in order to stabilise the land link between Spain and Italy (King 1990, 37-40), after nearly a century of influence and conflict in the region. The northern fringes of the study area in the Middle Rhône Valley and the Upper Pyrenees were not annexed until Caesar's Gallic Wars and Augustus' conquests of Cantabria and the Alps in the late 1st century BC (Rivet 1988, 74-79). The region experienced peace and prosperity interrupted only by a series of recessions affecting the olive oil industry (Buffat *et al.* 2001). A more general economic downturn seems to have detrimentally affected the region in the 3rd century and its end is marked by the wide-ranging administrative reforms of the tetrarchs. Both areas drifted out of Roman control over the course of the 5th century. Visigoths were settled in Aquitania in 418/419 (Burns 1992, 56-60), rapidly expanding southwards into *Narbonensis*, to establish a nominally federate kingdom although Arles remained under Roman control until the very end of the empire (Wickham 2005, 44-45). Roman control in Spain began to falter when groups of Suebi, Alans and Vandals crossed the Pyrenees in 409 (Ripoll and Velázques 1995). The Vandals moved to Africa in 429, leaving behind groups of Suebi, Alans and others to dominate the Iberian Peninsula. On the prompting of the Roman government, the Visigoths began a partial conquest of the peninsular (Wickham 2005, 38) and by the 460s direct Roman control had faded away.

1.6 SOCIO-CULTURAL DEVELOPMENT

There was a significant degree of socio-cultural diversity in the villa landscapes of the western provinces in Late Antiquity. Competing traditions at the regional level coupled with more local identities, individual or group agency and different geological factors (such as soil fertility) all affected the development, structure and eventual demise of villa landscapes (Hingley 1989, 121-132; Roymans and Derks 2011, 11-28). Each study area has a distinct trajectory over the course of the Roman period with all areas incorporated prior to the 2nd century AD, parts of Southern France and Spain being the earliest, in the 2nd century BC. All these areas had flourishing pre-Roman societies prior to incorporation (Millet 1990, 9-37; Roymans 1996; Feugère, Passelac, Pellecuer and Garmy 1998) and these strong local identities are reflected in the development of regional villa culture (Habermehl 2014, 19-22; Rind 2015).

In the Mediterranean sector of this study, the majority of the littoral zone and fertile hills were occupied by villas; with a significant majority of sites adhering to associated forms of display and investment, having been exposed to Italian land management practices for nearly half a millennium by the 4th century AD. Despite this, non-villa zones existed; the higher and less fertile areas and marshland were the preserve of more traditional forms of occupation (Miret, Sanmartí and Santacana 1991; Pellecuer 1993; Roger 1993; Revilla Calvo 2004).

In Northwestern Europe, the pattern is more mixed. In Britain and North Gaul, the Romanised rural tradition was weaker with a sparser density of villas, except in certain areas such as Somerset or the Continental Loess Belt. Large tracts of land constituted non-villa landscapes, where more traditional architecture prevailed (Roymans and Derks 2011 *op. cit.*; Smith *et al.* 2016, 329-330). The Menapian coast (De Clercq 2011), the Pennines (Smith *et al.* 2016, 318-319) and the Batavian *civitas* (Roymans 1996; Vos 2009), as well as more fertile areas such as the Vale of York, were largely uncolonised by villas, with Iron Age traditions continuing into the Roman period. These strong pre-Roman traditions characterised multiple regional variations in the development of the villa landscape. Elements such as axially orientated compounds (Roymans and Habermehl 2011), British and Gallic 'Aisled Houses' and the tendency for British and Gallic villas to be situated on pre-existing Iron Age sites (Brüggler *et al.* 2017, 31-33), show a significant degree of diversity in the northern provinces. This stresses that the development of the villa landscape in the north was a multi-faceted and varied process. Each of these areas demonstrates significantly varied socio-cultural trajectories with different levels of institutional continuity.

1.7 STRUCTURE OF THE STUDY

The objectives set out in this chapter are examined in the course of this study. Chapter 2 explores the data and sets out the operational and methodological processes behind the analysis, introducing the data set. The following three chapters constitute the bulk of the research for this project. In these chapters, the regional data sets are examined and reconstructed and modelling and analysis are applied to identify any trends in development across individual study regions. These chapters are uniform in setup and approach, in order to facilitate comparison between regions, a key aim of this study (see section 1.2). The final chapter synthesises this research and provide some meaningful conclusions on the morphological changes of the villa landscapes; attempting to deliver a wide-ranging and broad image of transformation on a supra-regional scale during Late Antiquity and the transition to the Early Middle Ages. The data itself is laid out in an inventory at the end of the research.

Date	General Periodisation	Dynastic Periodisation	*Britannia*	*Germania Secunda and the Belgic Hinterland*	*Gallia Narbonensis and Northeast Tarraconensis*
250	**Middle Roman Period**	Severan Dynasty (193-235)	260-274: Rule of the 'Gallic Empire'	260-274: Rule of the 'Gallic Empire'	260-274: Rule of the 'Gallic Empire' in Hispania
		Solider Emperors (235-274)		250s-300: Depopulation of Lower Germany	
		The Restoration (275-284)	286-293: Usurpation of Carausius		
		Early Tetrachy (284-300)		297: Provincial restructuring and restoration of the limes	
300	**Late Roman Period**	Late Tetrachy (300-313)			c. 300: Provincial restructuring
					310: Revolt of Maximian
		House of Constantine (313-361)	343: Constans I campaigns in Britain	355-360: Campaigns of Julian	
350		House of Valentinian (361-383)	367-368: Barbarian Conspiracy		c.360s: Arles made capital of Gaul
			382-383: Usurpation of Magnus Maximus		
		House of Theodosius (383-423)	396-399: Stilicho's Pictish War		
400			406/407: Usurpation of Constantine III	406: Barbarians cross the Rhine	
			410: Traditional date for the end of Roman rule	407-476: Frankish foederati occupy Germania Secunda	408: Honorian revolt in Spain
				407-411: Constantine III campaigns in Gaul	409-411: Revolt of Gerontius
					411: Constantine III defeated at Arles
				411-413: Revolt of Jovinius	411-413: Revolt of Jovinius
				428-430: Foederati arrangments	
450		Last Western Emperors (423-476)	Sub-Roman Britain	450s: Foederati arrangments	461: End of Roman Spain
					466: Gothic conquest of Narbonensis
500	**Post-Roman Period**	Post-Roman Kingdoms		Merovingian Kingdom (481-751)	Merovingian Kingdom (507-751)
					Visigothic Kingdom (476-720)

Table 1.1: Chronological table of the period under study (J. Dodd).

Chapter 2 – Concepts, methodology and data set

This chapter will introduce the methodology behind this research and assess the basic characteristics of the data set. It will establish an operational process to answer the research questions introduced in section 1.2, whilst exploring the relationship between the method of investigation and the biases and issues related to the data set. Furthermore, this chapter addresses the key issue of data variability, establishing a new data-grading framework for consistent comparison.

2.1 SOURCES AND RESEARCH TRADITIONS

The data set for this research is very large, encompassing seven modern states and straddling a range of research traditions. This study draws upon a large repository of evidence, including published reports and grey literature. Regrettably, primarily archival material could not be integrated into this study, due to the already vast amount of sources covered.

2.1.1 RESEARCH TRADITIONS

A number of distinct regional research traditions are present in the extensive research areas. The changing nature of excavation practices has generally led to a slowly increasing quality of available data. Despite this improving trend, this study still relies upon data with a wide-ranging quality and reliability.

The primary distinction between different regional research traditions is at the supra-national level. There is a dichotomy between research in Northern and Southern Europe. Roman rural archaeology in the Mediterranean has tended to rely heavily upon survey with a more classical focus to excavation. Theoretically, this has resulted in less advanced models of settlement dynamics and a far tighter definition for rural features such as villas and *agglomerations secondaires* (*cf.* Esmonde Cleary 2013, 140-142 for an introduction to larger rural sites). The predominant method of investigation in Northern Europe has been excavation (Roymans and Derks 2011, 4-7) with a long tradition of investigation beginning in the 18th century (Hingley 2008, 164-173). Within the context of excavation, there is also a clear north-south divide. Excavation in the north has been influenced significantly by new recording techniques and standards, which regions such as Spain have not been adopted until recent decades (Díaz-Andreu 1993, 80-81). This has generally resulted in a higher standard of excavation and recording across Europe, although at no point is this absolutely the case. Following the advent of a European wide archaeological policy with the Valetta Convention in 1992 change is underway, although there is still a sizable distinction between the two research traditions (Kristiansen 2009).

The oldest research from the 19th and early 20th century was generally concerned with the monumental aspects of a settlement, ignoring ancillary structures and the broader landscape. These excavations were driven by antiquarians and private societies (Habets 1878; Hettner 1882; Barker 1900) with their theoretical basis of investigation drawn from classical texts (Roymans and Derks 2011, 4). Over the course of the early 20th century these excavations were superseded by more formal excavations led by state museums or universities with one exception being Britain, where management drifted into the orbit of

a state agency in the 1920s (Thurley 2013, 84-98). Museums such as the Rijksmuseum van Oudheiden (Holwerda and Goossens 1907; Goossens 1916; Remouchamps 1928) and the British Museum led large scale and wide-ranging excavations throughout the inter-war period. A majority of these excavations have left us with a poor understanding, especially for later material as so many lack detailed stratigraphic information and chronological discussion on the later phases of villa occupation and are often of little or no use to this study.

This phase of museum-led excavation lasted different lengths in different countries, ending in Britain in the 1920s or 1930s and in the Netherlands by 1960. An explosion of excavation in the post-war period, driven by reconstruction, saw the responsibility for investigation passed onto state agencies and the development of new techniques and recording procedures that set the scene for a tradition of research excavation in Britain, Germany and Benelux that lasted throughout the 1970s and 1980s. This then gave way to a developer-led focus of commercial preventative archaeology after the Valetta Convention in 1992 (Bradley *et al.* 2012) with the UK and France acting as the most vigorous proponents through INRAP in France and PPG16 in the UK. Despite this vast increase in archaeological investigation, the pace of publication has not kept up and a great deal of research is unpublished and does not often make it into large-scale synthesising studies. This trajectory is mirrored across most of Western Europe (Roymans and Derks 2011, 4-11; Brüggler *et al.* 2017, 22-24).

One region that bears significant differences to the general trend in the rest of Europe is Spain. Early Spanish archaeology followed a conventional route, with investigation of the monumental buildings commonplace, although there is a degree of emphasis upon ecclesiastical aspects. These investigations were led by antiquarians and later the *Museo Arqueológico Nacional* (MAN). Roman rural archaeology was severely disrupted by the Civil War (1936-1939) and then profoundly influenced by the centralising ideology of the Falangist government between 1939 and 1975. Although there were specific problems with management of archaeology, specifically due to the divide caused by Santa-Olalla's domination of the *Servicio de Investigaciones Arqueológicas* (Díaz-Andreu 2014), excavation on the Roman past in the region under study did continue. Theoretically, however, it was isolated (Díaz-Andreu 1993, 75) with archaeology treated with some indifference, secondary to the medieval national founding myths (Díaz-Andreu 1993, 76). The Roman past was used to validate Spanish unity with a rigid ideological framework placed upon it that lasted into the 1970s (Díaz-Andreu 1993, 76-78). Following the end of the Franco regime in 1975 Spain rapidly underwent an institutional change (Díaz-Andreu 1993, 80; Pérez-Juez 2014) with the *Servicio de Investigaciones Arqueológicas* broken up into regional authorities. The invidiual regions directed their own heritage and archaeological management systems under the framework of the 1985 *Ley de Patrimonio Histórico Español* (Pérez-Juez 2014). Spain signed the Valetta Convention with liberalisation of the market occurring slowly in the 1980s and 1990s in line with the rest of the European Union and archaeology is now at a European standard.

2.1.2 SOURCES

General catalogues of Roman villas are available and serve as a starting point for identifying sites that undergo transformation. Large-scale catalogues have been used to identify sites in Spain (Gorges 1979; Fernández Castro 1982), Northern France (Grenier 1934; Agache 1978), Britain (Scott 1993), Belgium (De Maeyer 1937), Germany (Heimberg 2002/2003; Lenz 1999; Gaitzsch 2011), the Netherlands (De Groot 2006; Habermehl 2014) and Languedoc-Roussillon (Pellecuer 1993; 1995; 1996). Further information and site lists are available through two digital GIS projects: the *Rural Settlement of Roman Britain* (University of Reading), and the *Digital Atlas of the Roman Empire* project (Lund University). Further source material can be extracted from the large-scale inventory of Roman sites jointly compiled by the *Académie des Inscriptions et Belles-Lettres* and *MESRI*: the *Carte Archéologique de la Gaule* (CAG) and the

French rescue repository at INRAP, although it must be noted that much information required for the present research has been excluded from all three of these sources.

Sites identified as having the potential for evidence of spatial and temporal transformation were then examined through the various national heritage organisations. These records generally are the first port of call for information on sites, providing location data, a brief overview of the site and often further reading, including the published location of site reports[3]. Despite their importance, these records are not without problems; documentation is often threadbare with little information recorded, whilst many entries have not been fully digitalised, the Dutch RCE *Rijksmonumentenregister* being a prime example of this. Secondary to this, some of the records are very old, especially those held by the Historic Environment Records (HER) in the UK and many have not been updated to include modern archaeological investigations on sites.

The most important resource for this project is the excavation report. Site reports have a long history. They developed out of *ad hoc* excavations led by local antiquaries and societies in the mid-19th century (Luard 1859; Schuermans 1867; Habets 1871). Reports of significant benefit to this project begin to emerge from the early 20th century, becoming more detailed with the development of stratigraphy and an appreciation of the scientific nature of excavation. Despite this general trend towards more detail, site reports still vary in quality, encompassing all possible degrees of publication. Some sites are well published and highly recorded (Brüggler 2009; Willis and Carne 2013; Hiddink 2014a; 2014b; 2014c) but others are poorly published (Rodgers and Linnington 1957; Willems 1986; 1988) or without significant archival material (Gilkes 1998). Unfortunately, many important sites are only partially published as small notes or *Vorberichten* in archaeological journals or state archives (Braat 1934; Brunsting 1950; Heimberg 1977a; Rech 1978). In many cases the original excavators are no longer alive, and their archives are now lost (Whiting 1941). Other sites, such as the villas at Sherstone and Bengel-Lindenstrasse, are almost entirely unpublished and await the funding and resources for publication. In most cases, such sites are entirely unavailable to this study as the information regarding occupation patterns is simply not available. Related to this is the problem of obtaining access to the reports. Many site reports are held only by the national heritage organisations or in hard copy local journals which are not available for general dissemination, although very best efforts have been made to incorporate as many as these as possible.

Within this body of material, evidence has been selected related to villa transformation. This comes from a variety of sources. Regional studies have been undertaken for several areas, whilst there are a series of synthesising studies utilising material from a number of different regions. However, broader scale synthesises are lacking and there is very little intra-regional comparison.

The three regions under study have all seen some form of examination into the nature of villa transformation. The Germanic provinces and Northern Gaul have seen the most intense work. Van Ossel (1992) established the scale and nature of transformation through the 4th and 5th centuries across rural sites, although this data set is now beginning to show its age. This has been supplemented by two databases concentrated further into France. Peytremann (2003a; 2003b) examined rural sites in flux between the 6th and 12th centuries in Picardy and the Paris Basin whilst Gandini (2008) looked at rural dynamics in Central Gaul. Smaller-scale regional studies have been undertaken in the German Lower Rhineland (Lenz 2001), *Germania Secunda* (Heeren 2017) and the region of the *Treveri* (Henrich 2006). The British evidence has been taken, with substantial revisions and updates, from an MA thesis covering parts of the Roman diocese (Dodd 2014).

[3] For example, Chew Park Lake; http://www.pastscape.org.uk/hob.aspx?hob_id=197267

Different research priorities in Southern France and Spain have generally left elements of villa transformation less studied, and subsequently there are fewer large-scale regional syntheses. Significant amounts of work have covered the region, albeit very sporadically or on a highly localised level, much of it under the auspices of the *Association pour la Promotion et la Diffusion des Connaissances Archéologiques* (APDCA). Pellecuer, and Pomèrades (2001) and Brun and Congés (1996) have established gazetteers of sites occupied beyond the 4th century in Provence and *Narbonensis Prima*. Brun and Congés (1996) have also conducted a selective survey of abandonment and transformation of sites in the 3rd century in Provence, whilst some synthesis has been done across the region by Schneider (2007) and Raynaud (2018). These broad surveys are useful to an extent; however, they are highly incomplete, and detail is lacking. Research in Catalonia is better grounded, with a basic distinction between pre- and post-3rd century sites being employed since the early 1970s (Gorges 1979, 42-48; *cf.* Lewit 2001). Limited survey has also taken place in coastal Catalonia, establishing the presence of a number of villa sites exploiting the littoral landscape in Late Antiquity (Carreté, Keay and Millett 1995; Chavarría 1996; Gurt i Esparraguera and Palet Martinez 2001; Prevosti and Guitart i Duran 2011; Diarte-Blasco 2018). Most importantly, several studies have established the pace of change across Catalonia. Chavarría (2007) undertook a large-scale selective study of the end of the Spanish villa landscape, supporting several smaller previous projects on the rural landscape (Chavarría 1996; 2001). These studies are of extreme importance to the rural archaeology of Northeast Spain during the Late Roman period.

2.2 DATA VARIABILITY AND PRESENTATION

2.2.1 DATA QUALITY

Data variability means that not all sites can be taken as being of equal use and value to this study and that; consequently, a form of data grading is required to categorise sites according to their state of excavation. Four grades of data quality have been created, from A to D. This system, laid out in table 2.1, allows for the flexible interpretation of data whilst still placing such data within a useful structure.

Data Grade	Description
A	A site demonstrating clear evidence of final phase occupation and a large area of excavation, including the main house and ancillary structures. The report must be fully published, with ceramic, coin and diagnostic find reports. Sites in this category are generally excavated after 1950; however, this differs from country to country. The temporal group *Pre-1900* is never grade 'A' because the stratigraphic and planning evidence for late occupation is almost never present.
B	A site demonstrating evidence of final phase occupation. Plans and stratigraphy must exist, and excavation can consist of the one or more of the main structures on site. The report must be published or available in grey literature forms with ceramic and diagnostic finds. This grade can include any site excavated after the beginning of the 20th century.
C	A site demonstrating small-scale excavation history, either with parts of the main house or baths uncovered. Some plans and sections exist but publication is poor. This category also includes older large excavations where recording and data management have not been good.
D	No plans or sections, very little published. Excavation was not conducted thoroughly, or the excavation occurred before the advent of modern archaeological techniques. Survey only villas are usually categories in this grade, however, those with well-documented ceramic sequences can be included in higher groupings.

Table 2.1: Parameters of the data grading system used in this study (J. Dodd).

This is widely compounded by the reliance of this study of secondary sources. Naturally, any examination of large-scale datasets is reliant upon the judgement of the excavators when assessing features and chronology. Re-examining the primary archival material for each individual site is feasibly impossible. A close reading of many site reports demonstrates that in a variety of cases, the majority of them older

excavations, there are significant issues with the identification of features and the chronology of occupation. Although this can never fully be solved, this study has attempted to identify suspect chronologies and feature identification through a variety of methods. The data grading system (table 2.1) goes some way to classifying the reliability of information, whilst reappraisals undertaken by others have also been of use in critically examining excavation reports (for example Van Ossel 1992; Chavarría 2007). Equally, this study has critically examined the original reports and attempted to maintain a reasonable standard of identification and interpretation throughout the analysis.

Naturally, the quality of the data has a knock-on effect to the quality of the statistical analysis presented in this study. The reconstruction of statistical trends relies upon a certain level of data quality. Consequently, there is some variation in the certainty of the statistical conclusions laid out in analysis chapters. Generally, the macro-level analysis is good, with the large number of individual sites able to paint a relatively accurate picture of general trends and trajectories in the villa landscapes under study. It is a different picture at the level of microanalysis. There is greater variability in the assessment of evidence, with some analysis, such as the breakdown of fortified settlements relatively secure and others, such as productive capacity less coherent. This is not to say that trends and conclusions can be made, however, in many cases, for example, arable production variables, it is near impossible to present a cohesive picture of change at villa sites.

2.2.2 TEMPORAL VARIABILITY

In response to temporal inequality of the research, a framework for organising sites by excavation period has been devised, in order to develop a data hierarchy. In light of the long tradition of villa research, four periods have been devised to help categorise the excavation period (table 2.2); these roughly correspond with Europe-wide changes in archaeological practice laid out in section 2.1.1.

Period	Archaeological approach
Pre-1900	Antiquarian and *sociétés savantes*
1900-1950	Museum-led excavation and early state involvement
1950-1980	State agencies
Post-1980	Developer-led and preventative practices

Table 2.2: Chronological groups used in this study set against the general archaeological approach prevalent at the time (J. Dodd).

This method of data organisation however can be problematic. Some villas have been excavated many times throughout each of these chronological phases. This project will assign such villas to their most recent period of investigation. For example, the villa at Bignor was investigated three times in the 19th century, again for a period in the 1920s and finally undergoing two phases of state-sponsored excavation in 1965-1969 and 1975-1979. Consequently, Bignor can be assigned to the temporal period *1950-1980*.

Figure 2.1 illustrates the breakdown of sites under study within the context of the chronological framework laid out in table 2.2. An upswing of excavation is noticeable in most areas between 1950 and 1980. This is due to a number of factors. The post-war reconstruction programs saw a boom in construction, especially in housing programs. This roughly corresponds with the *Wederopbouwperiode* (1945-1965) in the Netherlands. This prompted the expansion of cities, towns and their associated infrastructure onto previously unexamined areas (Brunsting 1950; Rahtz and Greenfield 1977). The favourable economic

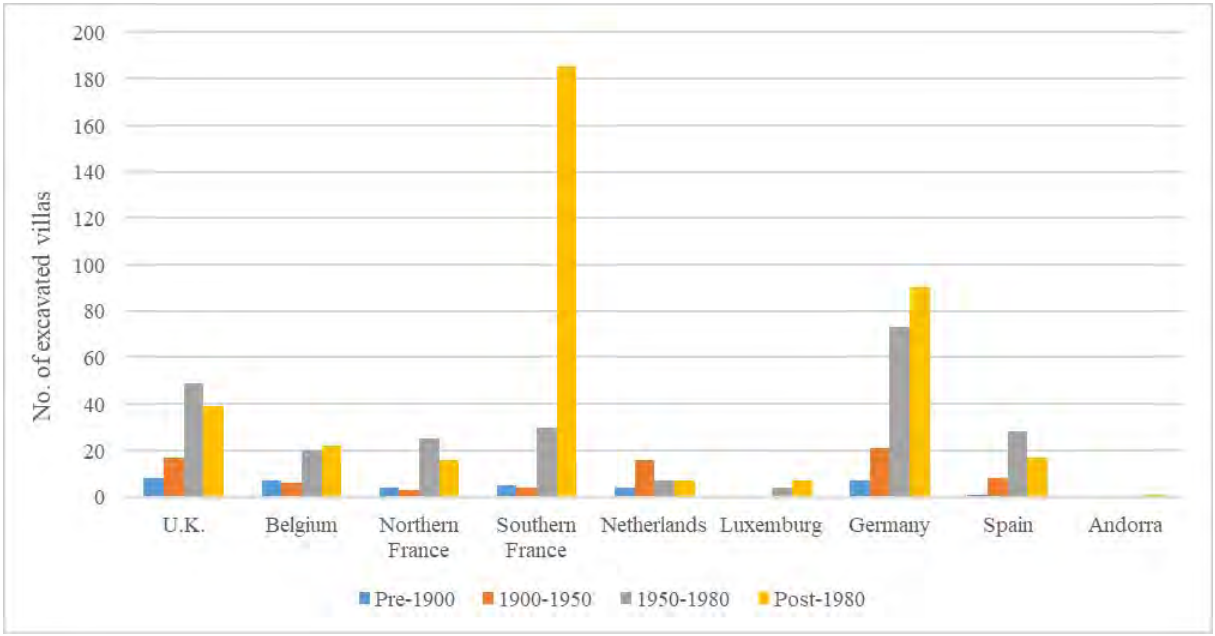

Fig. 2.1: A breakdown of villa investigation in Europe by period (J. Dodd).

conditions identified as the *Wirtschaftswunder* in Germany and the *Post-War Consensus* in Britain (Judt 2005) encouraged more construction, much of it on virgin land and a great deal of it state-subsidised. Furthermore, universities began to undertake decades' worth of excavation at individual sites, adding a great deal to our understanding of the Roman rural past. Much of this excavation came under the auspices of national heritage organisations such as the *Rijksdienst voor het Oudheidkundig Bodemonderzoek* (ROB) or the *Ancient Monuments Department* (MoW).

This pattern was repeated across much of Western Europe, with peaks in villa excavation in Great Britain, Northern France and Germany, whilst excavation levels similarly remained high in the Netherlands, Belgium and Luxembourg throughout the post-war period. Thereafter, changing political ideologies and evolving heritage management theories in the 1980s and 1990s negatively affected the rate of villa excavations across Western Europe. Despite this, some areas have retained a reasonable rate of excavation throughout this neoliberal period. Rural excavation has stayed high in Northern France and Belgium, partly due to the creation and development of *zones d'activités économiques* (ZAE) in economically depressed parts of the country, whilst the creation of developer-led archaeology in the UK after 1990 has resulted in a steady rate of commercial excavation of newly discovered sites. Spain and Southern France have experienced a boom in villa excavation from the 1990s onwards. In Spain this expansion is somewhat inspired by the development of new regional archaeology authorities and the influx of new methods and theories into Spanish archaeology, whilst in Southern France, development and commercial work, especially in the 1990s, on large-scale infrastructure projects such as the TGV rail network has seen a huge expansion in investigated villa sites. Germany has seen continued rescue archaeology, especially in the areas of the Hambach (HA), Inden (WW) and Garzweiler (FR) concessions where archaeological excavation prior to lignite mining has been near constant since the late 1960s (Gaitzsch 2011). This has certainly acted as a weight within the data, skewing the results in Germany, especially considering that relatively few sites elsewhere in the German study region have been excavated since the 1980s.

2.2.3 DATA PRESENTATION

A standardised recording and presentation system has been applied to the entire data set. This has been done, despite the disparity in data from individual sites, in order to develop a meaningful basis for comparative analysis and provide a standard baseline for statistical comparison. The standardised list of site information is laid out below and has been designed for easy data management without compromising the amount of information available for analysis.

- *Site ID*: Identification number assigned to site
- *Site Name*: Modern name for site
- *Country*: Modern nation
- *Region*: Late Roman province
- *Geodetic Coordinates:* Location of site within the ETRS89-LAEA coordinate reference frame
- *Excavation Years*: (Pre-1900/1900-1950/1950-1980/Post-1980)
- *Data Grade*: Quantification of data quality (A/B/C/D)
- *Villa Type*: Morphological form of the site
- *Villa Class*: Size of villa (Major/Minor adapted from *Historic England* guidelines)
- *Plans Y/N*: The presence of plans and sections
- *General Site Description*: Chronology and historical background to the site
- *Bibliography*: Publication details
- *Transformation Yes/No boxes*: (Habitational/Productive/Funerary/Cultic/Fortification/Material Culture/Abandonment without transformation)
- *Transformation Description*: The most important section is laid out in a set format. This presents the information sequentially, by both building and room if possible. Funerary details are recorded and information on individual graves laid out in a separate database. The final coin and ceramic assemblages on a site are also listed, in context where feasible.

2.3 SIZE AND GEOGRAPHICAL SPREAD OF THE DATA SET

The data set utilised by this study consists of a selection of 775 sites. This data set is presented in a standardised form as a catalogue. This section deals with the size and geographical distribution of the data set. The regional distribution of the data will be introduced, and the data broken down temporally. The breakdown and presentation of sites in the inventory is addressed later in this chapter.

2.3.1 SIZE AND DISTRIBUTION

The data set for this study is divided into three large regions. It has been separated by Late Roman province in order to enhance the comprehensibility of the data and further develop views on regionality within an ancient context, rather than placing sites within the framework of modern national borders (Van Ossel 1992, 15-18) or arbitrary geographical boundaries (Habermehl 2012, 24). Table 2.3 illustrates the breakdown of sites by province and illustrates the numbers of sites under study.

Late Roman province	number of villa sites catalogued	Number of villas with a Late Roman phase	Percentage of catalogued villas with a Late Roman phase
Belgica Prima *	46	37	80%
Belgica Secunda	91	55	60%
Germania Prima *	20	16	80%
Germania Secunda	231	103	44%
*Britannia Prima**	54	52	96%
Britannia Secunda	15	15	100%
Maxima Caesariensis	44	33	75%
*Narbonensis Prima**	160	120	75%
Viennensis *	57	45	78%
*Tarraconensis**	55	39	70%
Totals	775	515	66%

Table 2.3: A breakdown of villa sites in this project by total number of sites and total number of villas with a Late Roman phase (* denotes a province which was only partially surveyed by this study) (J. Dodd).

2.4 METHOD AND DATA USE

On an operational level, this study is rooted in the analysis of a large multiregional data set. It will employ a highly integrated approach combining standardised data collection, spatial and temporal analysis and the examination of transformational trends through a comparative analysis of both regional and individual site trajectories. This is supported by traditional forms of archaeological analysis and the overarching synthesis of the data. The database underlying this project has been constructed in Microsoft Access, a program that provides a good basis for both statistical and comparative analysis. The comprehensive nature of the data, consisting of 240 high and moderate-quality sites and 535 poor quality records, provides a strong core for analysis. When set within an established statistical hierarchy (Richards and Ryan 1985) it can be used to highlight and plot the processes of change across a large canvas. This dwarfs previous regional studies in its multiregional and comparative approach. The problematic methodologies of prior studies, which present loose systems of classification and a chronic lack of definable terminology, are addressed in 2.5 and 2.7.

The application of this data set is conducted through a number of related analytical approaches: spatial, comparative and statistical. Spatial analysis takes the form of a GIS-based model in order to build maps demonstrating different spatial and temporal patterns charting the progression of transformation. Comparative analysis will develop a model for both one-on-one contrasts between individual site trajectories as well as evaluating differences across study regions. Statistical analysis will advance understanding of long-term trajectories of use, reuse and abandonment, providing large-scale sampling of the data to make statements and highlight trends within villa transformation.

2.5 A CONCEPTUAL APPROACH TOWARDS TRANSFORMATION

The broad term *villa transformation* has been repeatedly used in previous studies to describe a wide range of archaeological phenomena. This study breaks this large term into smaller categories, within the

framework of a classification system and is set out in Dodd (2019). Re-engaging with the way that these features are classified is a key part of this research. Classification systems have been used since the beginning of modern research into villa transformation in the early 1990s (Lewit 1991;Van Ossel 1992). More recent work has generally followed this convention; however, the systems in use are often highly regionalised (Van Ossel 1992, 127-142; Chavarría 2004, 76-85) and in many cases not fully developed (Ripoll and Arce 2000, 70-95; Castrorao Barba 2014, 261-262). Generally, these studies have tended to deconstruct the evidence of transformation into several broad categories: *productive transformation*, *habitational transformation*, *cultic transformation* and *funerary transformation*. This study will work within this convention, whilst adding two new categories; *fortification transformation*, partially addressed by Van Ossel (Van Ossel 1992, 161-165;Van Ossel and Ouzoulias 2000, 143-145) and *abandonment*, addressed later in this chapter.

The major problem with previous work is that there has been little or no standardisation to classification systems. They differ from author to author and each classification framework is often particular to the region under examination. Indeed, one previous paper called for further codification and standardisation (Ripoll and Arce 2000, 99). The categories used by previous studies, with the exception of Van Ossel's work on northern Gaul (1992), have proved rather vague in terms of feature categorisation. The current study will rectify this by presenting a greater range of more rigorous categories, expanded and augmented with a standardised terminology for individual features based upon the *Forum on Information Standards in Heritage* (FISH)[4].

2.5.1 HABITATIONAL TRANSFORMATION

This class of transformation refers to the presence of continued occupation or reoccupation of the physical fabric of the building, usually defined within the framework of a change in building styles with less emphasis placed upon Romanising elements and a dispensation with classicising architecture (Chavarría 2004, 80-81). In practice, this form of transformation is generally characterised by simple post-built structures, new rougher walls and more utilitarian floor levels in addition to ephemeral features, such as hearths or rubbish dumps (figure 2.2). This evidence is in many cases extremely vague, caused by a variety of factors including excavation biases and site formation processes and often is only very broadly datable. When elements of the features associated with habitational use are found in conjunction with other elements, such as Christian wall plaster or industrial waste, the evidence can be interpreted as belonging to a different class of activity.

2.5.2 PRODUCTIVE TRANSFORMATION

This type of transformation is the most diverse in terms of scale and scope of activity. It concerns transformation driven by economic activities such as the production and processing of raw materials. It is defined as the altered function of a building or room for the installation and use of artisan or productive facilities. These facilities can range in size from small single use smithing hearths to large, repeatedly used, grain processing facilities and encompass all forms of productive and artisan activity (figure 2.3). They are, however, most visible in larger scale production scenarios, where architectural and material evidence is more archaeologically visible.

[4] http://thesaurus.historicengland.org.uk/

Figure 2.2: An example of habitational transformation from Butleigh (UK): a rough flagstone floor overlying an earlier mosaic (after Absolute Archaeology[5]).

2.5.3 FUNERARY TRANSFORMATION

The secondary use of villa complexes for burial purposes is well attested in all of the regions in this study (Le Maho 1994, 10-24; Pellecuer and Pomarèdes 2001, 524-525; Lewit 2003, 261-262; Chavarría 2004, 81-83; Dodd 2020). This use, generally concentrated towards the end of occupation at many sites, is difficult and complex. Burials are generally assumed to date to the end of the Roman period or immediate post-Roman period; although in many places, there is evidence of funerary use into the Early Medieval and High Middle Ages, especially on Mediterranean sites. Funerary use is often very difficult to quantify, with its scale poorly recorded due to the ephemeral nature of many burials and an excavation bias against such features (Dodd 2020, 1-4). Many of these graves are circumstantial, easily destroyed by careless excavation or are in poor states of survival. This type of reuse takes many forms: it ranges from isolated single graves through to small groups and large-scale cemeteries (figure 2.4) and is not limited temporally or spatially within the villa complex.

[5] http://archaeologydataservice.ac.uk/library/browse/issue.xhtml?recordId=1118958&recordType=GreyLitSeries

Fig. 2.3: An example of productive transformation: a *caldarium* converted into a grain drying facility at Ingleby Barwick (UK) (after Willis and Carne 2013, 36, fig. 3.22).

2.5.4 CULTIC TRANSFORMATION

Similarly, the transformation of Roman rural buildings for Christian worship is well documented across all study-regions (Ripoll and Arce 2000, 74-88; Bowes 2002, 324-328; Bell 200; Chavarría 2004, 83-85). This can take a number of diverse forms ranging from a house-chapel conversion as in the case of the Villa Fortunatus (Puertas 1972) and Lullingstone (Meates 1979) to the reuse of abandoned buildings or squatter structures for cult activities: examples of which include Bradford-on-Avon (Corney 2002, 2003) and Echternach (Metzler, Zimmer and Bakker 1983, 29-45). Installations can vary in shape and size (figure 2.5) and are often difficult to discern without explicit evidence (Monfrin 1998).

2.5.5 FORTIFICATION TRANSFORMATION

The fortification of villa sites is a generally less common phenomenon and tends to be regionalised in specific areas, such as *Pannonia* (Christie 1992, 320), parts of the Germanic provinces (von Petrikovits 1971, 180-183) and North Africa (Rind 2009, 53-65). This project will examine fortification from an

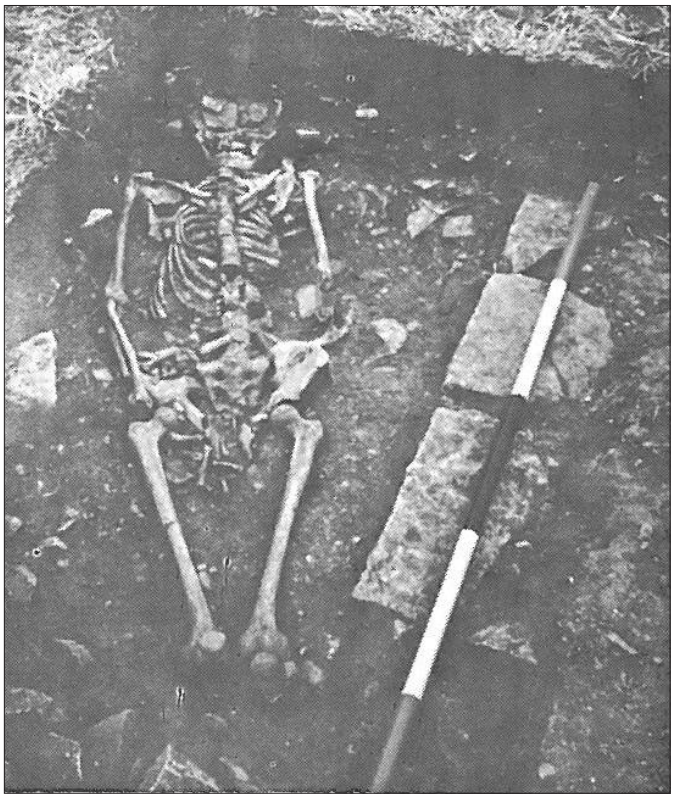

Fig. 2.4: An example of funerary use in a former villa structure: a single inhumation burial in the abandoned South Range at Ilchester Mead (UK) (after Hayward 1982, fig. 21).

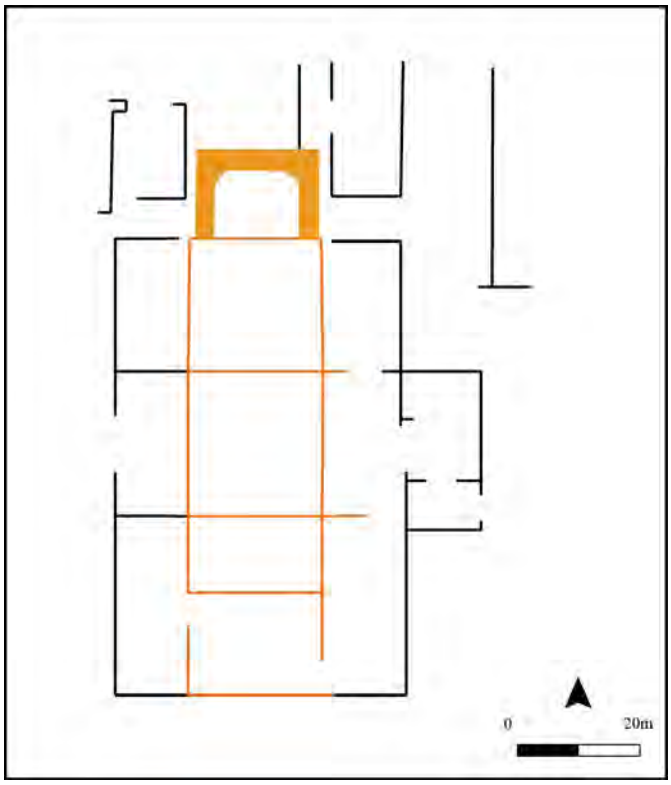

Fig. 2.5: An example of cultic transformation: a Christian basilica (highlighted in orange) into the Villa Fortunatus (Spain) (Dodd, adapted from Duval 1982, 37, fig. 3).

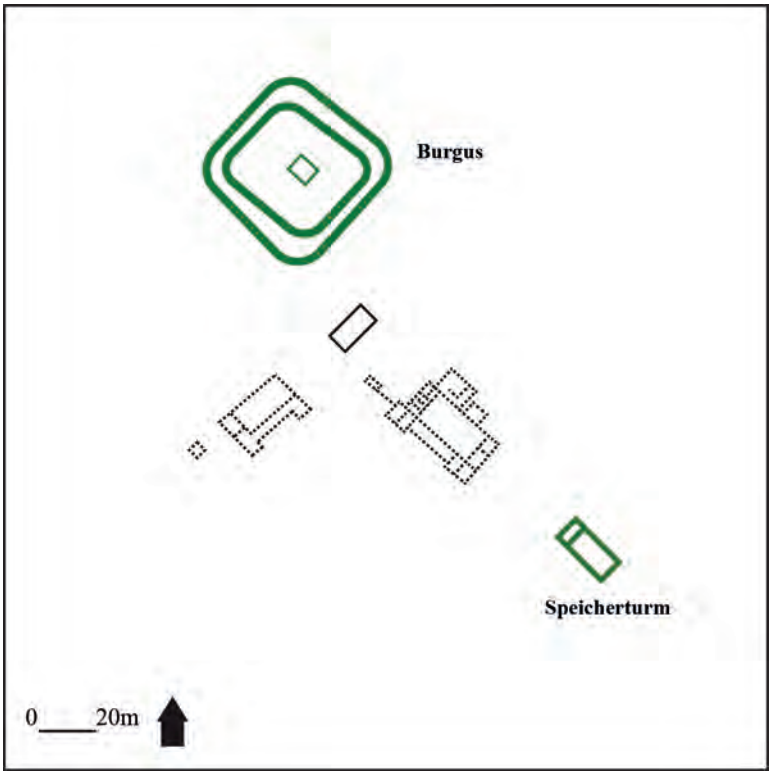

Fig. 2.6: An example of fortification. A *burgus* and a *Speicherturm* (highlighted in green) constructed at Rheinbach-Flerzheim (Germany) (Dodd, adapted from Gechter 1986, fig. 18).

architectural standpoint, defining it simply as the presence of defensive elements at a site. This includes both putative and truly fortified constructions. Fortified villas in Europe have generally been examined within the tradition of research on fortified towns and military installations (Johnson 1983; Henrich 2015, 177-187; Brulet 2017, 53). Little work has been done to integrate a framework for fortified villas into a more general supra-regional study of transformation. Work has primarily been focused upon regional aspects; these include the presence of *Speichertürme*, a form of fortified tower assumed to be used for storage (Bechert 1978) and *burgi*, small forts or watchtowers in Northern Gaul and Germany (Van Ossel 1992, 161-165; Van Ossel and Ouzoulias 2000, 143-145). Examples of fortified villas include *burgi* at Wijchen-De Tienakker (Heirbaut and Van Enckevort 2011) and Vettweiß-Froitzheim (Volsek 2003), and a *Speicherturm* at Köln-Müngersdorf (Fremersdorf 1933).

Class of Transformation	Archaeological Features	Material Culture	Colour Scheme
Habitational	postholes, pits, hearths, new floors, wood constructions, subdividing walls, middens, huts, *Grubenhäuser*.	domestic pottery, refuge and waste deposits, organic material deposits	Red
Productive	grain driers, threshing floors, metalworking smelters, smithing hearths, oil/fish production facilities, saltworks, water tanks, batteries of dolia, kilns.	Industrial quantities of pottery or industrial waste, e.g. metalworking slag, semi-finished products	Blue
Funerary	any form of burial, either individually or grouped	grave goods, human remains	Yellow
Cultic	chapels, oratories and baptisteries. Often only discernable by overt Christian evidence.	wall plaster with Christian motifs, overt Christian architectural elements	Orange
Fortification	*burgi*, defended enclosures, *Speichertürme*, fortified compounds.	N/A	Green

Table 2.4: A breakdown of transformation classifications and associated feature types; colour coded for the schematic system highlighted below (J. Dodd).

2.6 THE PROBLEM OF 'GERMANIC' ARCHITECTURE

One of the key problems with this system is the identification of 'Germanic' material culture and architecture on transforming villa sites. As has been stated in section 1.3.3, the debates surrounding this are difficult and highly theoretical. General applications of ethnic material culture identification have been critiqued (Kazanski and Périn 2008 and the response from Halsall 2011), whilst the *waffengraben* traditionally used to identify the *Reihengräber* style have been partially reinterpreted and integrated into the wider discussion on *foederati* (Halsall 2000; 2007; Theuws 2009) and in some regions, such as Lower Germany and Northern Gaul, this has been a much longer connected phenomenon in scholarship (Werner 1958; Böhme 1974).

Modern studies, deriving from after the widespread application of aDNA studies, have taken a more holistically view of migration and its archaeological evidence. This approach, moving beyond the debate between ethnogenesis and *etnische Deutung*, have begun to refocus on the identification of migrant populations through the archaeological evidence (Anthony 1992; Hamerow 1997; Burmeister 2000). Further work has refined this, especially surrounding the identification of building styles. The key examples here are the appearance of sunken-feature buildings, widespread throughout Northern Europe in the Early Medieval Period. These structures, called *Grubenhäuser* in the German literature appear in both Northern Gaul and Anglo-Saxon Britain, as well as in modern Germany (Hamerow 1999). The second key element to this appearance is the three-aisled longhouse, present in Germany and Northern Gaul, but not in Britain, where Hamerow (1999) argued that other options could be taken into consideration, primarily a desire to appear more Roman by dispensing with elements of the Germanic past. This complements the argument made by Burmeister (2000, 542), who stresses that social change rapidly changed central occupation houses whilst productive outbuildings, far from the centre of power at settlements remained unchanged (Heeren 2017, 152-153 for a summary of the arguments and critiques of this). This study takes this as a starting point for archaeological analysis. The two key forms of Germanic architecture: the three-aisled longhouse (typically referred to as Wijster Type A and B) and *Grubenhäuser* are assumed to be immigrant in origin, although problems with identification in certain regions are further explored in section 5.4.2.

2.7 CHRONOLOGY AND SITE PHASING

The conceptual approach to transformation described in section 2.5 requires a good chronological framework in order to develop detailed temporal and spatial analyses. The chronological aspect of this study will be employed within a settlement development trajectory. This project will utilise chronological phases to build individual site biographies. These chronological phases are relative to each site, primarily due to the poor stratigraphy of many features and the nature of the chronological evidence. A uniform system of phases across all sites and regions is impossible given the wide variety of biases inherent in the data. The phases in use are generally broad, in most cases spanning half centuries except in specific cases where occupation dates are securely dated. These phases will be used in two ways: firstly, they will be employed in combination with a series of colours, which will designate a transformed use of space as illustrated in table 2.4. Every site in this study has been placed within this framework. These colours will demonstrate the changing nature of the site over the Late Roman period and allow both for individual site biographies to be developed and for high-level comparative analysis between sites. Secondly, the chronological phases will illustrate the changing size of individual villas throughout Late Antiquity, allowing meaningful conclusions to be made of chronology and development at these sites.

One of the primary issues with all studies of transforming villas is a lack of chronological engagement (*cf.* Chavarría 2004, 67-68). There are no settlement trajectory models for Late Antique villas and this has left a gap in our understanding of the mechanisms and practicalities of rural change. The theoretical basis for this system has developed from work done on the Late Iron Age and Early Roman Period. Habermehl developed a schematic system to chart the development of Early Roman rural settlements (2014, 51-55). The development trajectory used in this study builds on this work, applying some related methodological practicalities. However, unlike Habermehl's study, which was able to easily chart the development of sites by large-scale typological and spatial trajectories, this project cannot adequately achieve the same clarity with transforming villas.

Practically, the results of this scheme are demonstrated in table 2.5. Both sites illustrated here are well excavated and recorded although this is not the case for a large proportion of the sites under study. Table 2.5 demonstrates both aspects of chronological phasing, a demonstration of the reorganisation of social and productive space in addition to the trajectory of abandonment of elements of the sites over the course of the 4th and 5th centuries.

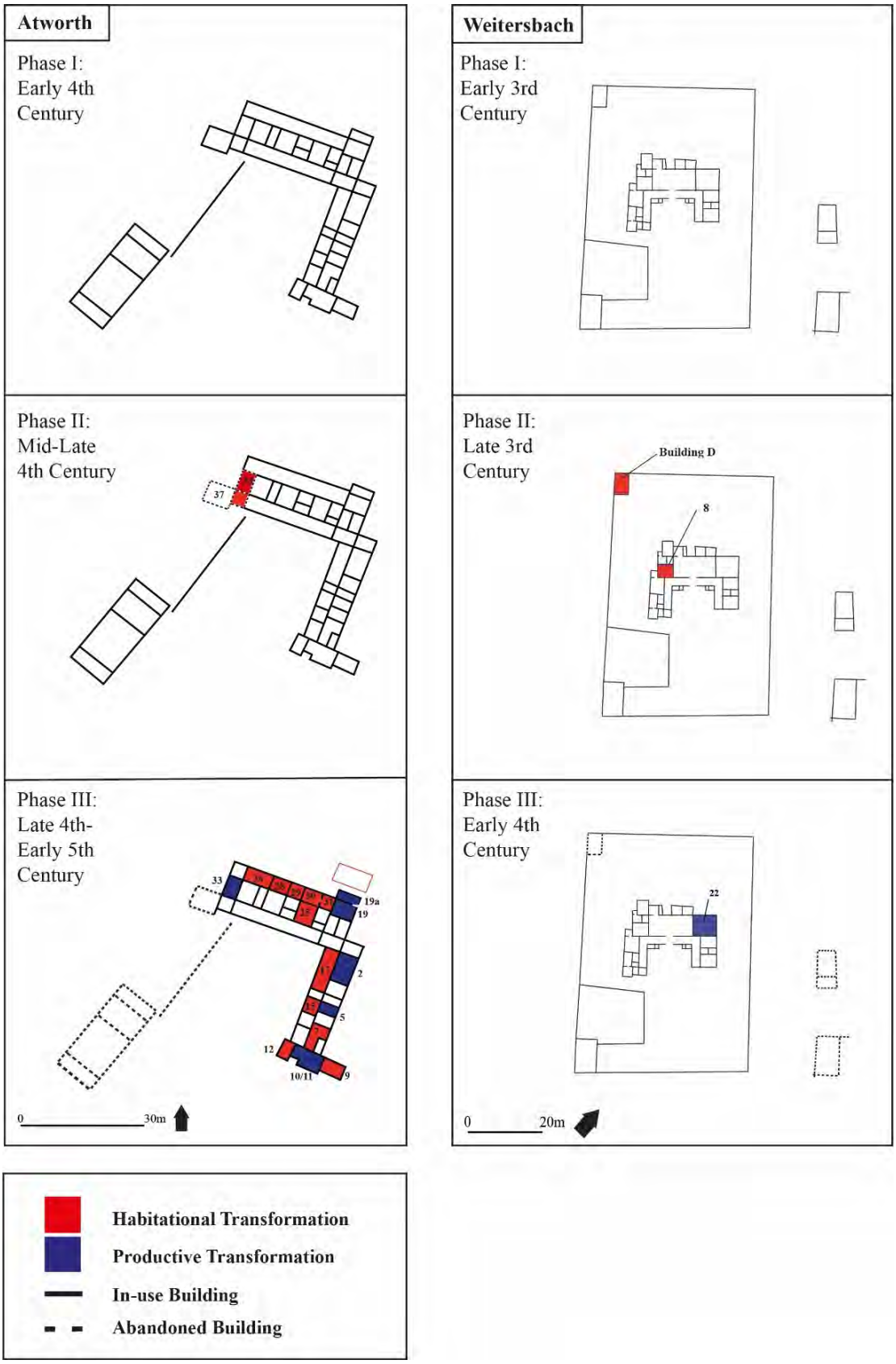

Table 2.5: Two examples of phasing plans presenting as villa development schemes used in this study. Both plans demonstrate the diverging trajectories of individual site biographies (J. Dodd).

2.8 FURTHER ISSUES AND PROBLEMS

There are a number of problems and issues with this investigation of villa transformation that require some elaboration before the bulk of the analysis is undertaken.

2.8.1 DATA BIASES AND NORMATIVE JUDGEMENTS

As already stated, the data suffers significantly from wide-ranging quality and reliability problems. The first key data bias is survival. Modern urbanisation has taken its toll on the preservation of Roman villas across Western Europe, whilst areas of Northern England, parts of the Low Countries and Eastern France were highly industrialised and much of the fertile areas of Western Europe have been intensively cultivated for centuries. This process has ploughed out or destroyed many archaeological remains, realistically giving us a small selection of useable data, making it important to extract every piece of information from surviving sites. Nevertheless, only a tiny part of the villa landscape of the Western Empire has been excavated; research attention has been directed at certain regions such as the southwest of Britain (Branigan 1976) and the *Rheinisches Braunkohlerevier* (Gaitzsch 2011) for historical and economic reasons, respectively.

This excavation bias has left significant regions with *lacunae* in the Roman rural landscape. In some cases, these may represent non-villa landscapes, for example the Menapian coastal region in Flanders or the Catalan Coastal Range. In many other cases, this is an example of excavation bias, such as the Vale of York or parts of Belgian Wallonia, which have not been extensively surveyed or studied. Related to this research bias is a publication bias. This significant problem with excavation in terms of recording and publication creates a bias within the data used for this project. Somewhere in the range of 10,000 villas have been examined or excavated in Western Europe, however many villa sites are represented by small-scale antiquarian excavations or poorly understood surface scatters. Only a small minority of these have been examined to a high standard, using modern techniques. A lack of detailed publication automatically creates issues when attempting to phase and map these sites as well as developing site biographies, impinging on the ability of this study to make meaningful conclusions. For much of the last two centuries villa transformation has suffered an excavation bias. Villa transformation and post-villa activity have often been viewed as not worthy of excavation. This excavation bias, fuelled by the academic preconceptions of the early antiquarians, depicted these phases of occupation as of little archaeological value. The extreme consequence of this viewpoint manifests itself through the wholesale destruction of Late Roman and sub-Roman elements, without any recording, in order to expose the Early Roman remains (Sánchez 1997; Rudling and Leigh 2013). The academic bias inherent in this approach has left us with little of the much-needed detailed evidence for the biographies of individual sites.

2.9 CHRONOLOGICAL AND THEMATIC CONSIDERATIONS

The study must contend with a series of issues within its chronological framework. These are divided into two categories - firstly, the problems of establishing functional chronologies at both individual sites and within regions and secondly, the general state of literary evidence.

The literary evidence for Late Antiquity is complex and contradictory. The period under study runs from the middle of the 3rd century until the middle of the 6th century and covers a wide variety of literary source material. This material can broadly be broken down into several categories: works from the classicising historical tradition, religious sources, legal sources, private correspondence and sources associated with the government, both bureaucratic and panegyric.

The earliest part of the temporal framework is covered by the historians Cassius Dio and Herodian, who both wrote classicising histories that provide some detail for the end of the Severan period and the beginning of the 3rd century crisis. The fragmentary histories of P. Herennius Dexippus, St. Cyprian and the poetry of Commodianus also provide some information on the political situation of the empire at the time (Alföldy 1974). However, the pessimism of later authors, notably the 4th century historians Aurelius Victor, Eutropius and the author of the 4th century *Historia Augusta,* have significantly influenced modern views on the 3rd century.

Fortunately, the history of the 4th century is more complete. The work of Eusebius of Caesarea, especially his *Vita Constantini,* gives us a window on the situation in the early 4th century. Elements of the Christian tradition, especially the works of St. Augustine, St. Jerome and Lactantius, also shed some light on the period (Cameron 1993). The second half of the 4th century is well appraised by the surviving books of Ammianus Marcellinius, which gives a relatively complete overview of the period AD 353-378. In contrast, the 5th century is badly covered with only fragmentary works giving an insight into the history of the period. The histories of two classicising eastern historians, Priscus and Olympiodorus of Thebes and their imitators Zosimus, Sozomen and Philostorgius (Blockley 1981, 1983) are useful. Despite this, as regions fall out of the Roman orbit, they tend to disappear from the sources and the focus of literature tends to concentrate more on the Mediterranean during the course of the 5th century.

Supporting these sources is the comprehensive, if controversial (Kulikowski 2000; Ward 1973), document referred to as the *Notitia Dignitatium*, a compendium of the early 5th century army and bureaucracy together with the collection of Roman law in the *Codex Theodosianius*. Further evidence comes from the corpus of letters, panegyrics and poetry, especially those of the 5th century aristocrat Sidonius Apollonaris and his contemporary Ruricius of Limoges (Mathisen 2001), the hagiographer Constantius of Lyon and the poet Ausonius of Bordeaux, specifically his poem *Mosella*. These are supplemented by three important regional sources: Prosper, Hydatius and the Gallic Chronicles of 452 and 511 (Muhlberger 1990).

The immediate post-Roman period and the 6th century are covered by a variety of disparate sources. The primary source for Gaul is the *Historia Francorum* by Gregory of Tours (Goffart 1989), an ecclesiastical and royal history of the Merovingian dynasty whilst his letters to and from Venantius Fortunatus provide insights into elite interaction during the 6th century. This is supplemented by elements of the *Getica* by Jordanes. The *Getica* purports to be a history of the Goths and gives valuable insights into Early Medieval population movements and Late Roman Gaul (Goffart 1989). Sources for 5th and 6th century Britain are extremely scarce. Gildas gives us a view of Britain couched in terms of a polemic sermon (Miller 1975, 241-261) whilst the Venerable Bede wrote an ecclesiastical history in the 8th century although it is sparse for the post-Roman period (Higham 2006). Early Visigothic *Hispania* is mostly understood through ecclesiastical historiography. A number of chronicles exist: primarily drawing on the works of Isidore, Bishop of Seville. He compiled a history of the 'Germanic' *gentes* who settled in *Hispania* (Donini and Ford 1966), mainly utilising the older works of John of Biclaro (Baxter 1999, 1-11) and the Chronicles of Zaragoza, possibly written by Maximus, Bishop of Zaragoza in the 6th or early 7th centuries (Collins 1980).

Sidonius Apollonaris and his contemporaries are the most important of these sources. A villa owner in Gaul and an established member of the Late Antique aristocracy (Mathisen 1981), he is able to give

us first hand evidence of the changes in the socio-political fabric of the second half of the 5th century whilst illustrating the confused loyalties of early post-Roman elites in Gaul (Harries 1992). Indeed, he briefly describes elements, which bear some resemblance to archaeological realities (*Epistulae* II.9.viii-ix). Another often-referenced work is the *Vita Sancti Germani*, a hagiography by Constantius of Lyon (Hoare 1965). A part of this painted a probable metaphorical picture of a derelict rural building (*Vita Sancti Germani* 10) and its partial reuse by St. Germanus of Auxerre (Percival 1996), although the origin of this literary trope may originate with Pliny (*Epistulae* VII, 27). These literacy sources do not really give us a detailed analysis of the Late Roman transformations but rather provide a framework within which the processes of change can be placed within their historical contexts.

2.9.2 ARCHAEOLOGICAL EVIDENCE

Traditionally, numismatic and ceramic evidence has been utilised as primary chronological indicators in dating final phase occupation at rural sites. There are, however, significant operational issues with this form of analysis when applied to the later stratigraphy of rural sites.

Numismatic evidence is important for dating final phase deposits at villa sites. However, the coinage found in the stratigraphic record differs widely in quality and quantity. Inconsistencies in monetary supply, such as gluts and bottlenecks (Reece 1984, 158-160; Reece 2003, 141-142) and the uncertain penetration of a monetary economy to the base of the rural settlement hierarchy (Reece 2003, 142-144; Walton 2011, 294-296) all play a role in the use of the numismatic evidence as a chronological indicator. From the 1st and 2nd century onwards coin use was increasingly the method of exchange and had become embedded in the rural economy by the middle of the 3rd century (Aarts 2000; Reece 1984; Aarts 2015, 212-214; Allen *et al.* 2017, 240-242) although it is probable that the economy was never fully monetised (Millet 1990, 178-180; Reece 2003). Coin use and therefore coin loss is concentrated around military sites (Aarts 2000; Wigg-Wolf 2016, 161-179; Allen *et al.* 2017, 239-240) and is far less apparent at rural sites (Brulet 1990; Van Ossel 2006, 558-559).

Coinage was minted in economically viable quantities in the Roman West until the second half of the 4th century and numismatic evidence manifests itself on many sites until this period. This is partly due to the reorganisation of mints under Diocletian, which gave each region a dedicated 'local' mint (Hendy 1972, 75-82). Trier acted as the primary regional mint for the entire northwestern zone (Wigg-Wolf 2016, 217-218) with a sporadic mint producing from London at certain times (Mattingly 1921, 254-264). Southern France was served from a mint based at Arles from 313 onwards (Hendy 1972, 77-78) whilst Spain did not have a dedicated diocesan mint, but rather much of its coinage came from Arles (Mattingly 1921, 260) although mints were sporadically used, with Barcelona striking bronze and silver between 409 and 411 (Kulikowski 2004, 163). The last major shipments of bronze, primarily produced at Trier, Lyon and Arles arrived in the northwest provinces and *Britannia* in 388 and 395 (Kent 1994, 26-28) with a trickle of erratic supply until 405 (Brickstock 2000, 35; Wigg-Wolf 2016, 227). This correlates with decreasing coin recovery rates in the late 4th and early 5th centuries in the northwestern provinces and *Britannia* (Esmonde Cleary 2017, 186-189). Despite this there was a continued flow of gold coinage northwards into the 5th century, although the majority of it was passed onto 'Germanic' *foederati* (Roymans 2017, 66-70, 74-75) or combined with *Hacksilber* to pay off warlords north of Hadrian's Wall (Hunter and Painter 2017, 90-93), effectively taking it out of the economic cycle.

This situation is much more complex than the brief overview above would suggest. Uneven and unstable supply was the norm in the western provinces during Late Antiquity, especially *Germania*, *Belgica* and *Britannia*. Gluts and bottlenecks in the supply of coinage adversely affect our perspective of the habitational trajectory of individual sites, especially the archaeological analysis of site abandonment. This has been notably been examined in relation to the supply disruption at the end of the 3rd century (Kro-

pff and Van der Vin 2003; Kropff 2005; Heeren 2016, 193-195). Supply problems acted as the stimulus behind the creation and use of imitation, counterfeit or 'barbarous' coinage, a grouping of mass-produced copies. They appear in times of economic crisis and seem to have been widely used across the northwest (Pilon 2004, 386-389; Pilon 2016, 265-279). These copies were produced unofficially or semi-officially at a variety of different sites and in some cases form part of productive transformations at a number of villa sites. Copies occur in large numbers in two distinct phases; the second half of the 3rd century, when supply was disrupted at the end of the Gallic Empire and again in the 350s, when it is argued that raiding adversely affected the central supply of coinage (Wigg-Wolf 2016, 222-226) and local authorities met the shortfall (Kropff 2005).

Walton (2011; 2016) has highlighted the difficulty of establishing reliable numismatic models for the end of occupation at selected sites (Walton and Moorhead 2016). This is compounded by an inability to establish an effective *terminus post quem* for coin deposition. Even if a coin was minted c.388 it may still have been in use in 410 or even in 430 and could quite easily have been deposited then. Despite some scholarship suggesting a catastrophic end to a monetary economy (Agache 1983; Gerrard 2014), coinage was used long after the end of the formal Roman economy, either in market exchange or in non-functional or symbolic formats (Adby 2006). Evidence of this arises from both Saxon (Williams and Newman 2006) and Merovingian sites (Theuws 2009; Derks 2017) where Roman coinage has been recovered from various contexts. In essence, this demonstrates the circumstantial evidence provided by coins as they can only give a *terminus post quem* for the context or assemblage after the date of minting, useful though this is for some study. It does not lend any meaningful weight to an attempt to study transformation, in situations where elements of the Roman past appear to have been reused and altered.

In some respects, ceramic indicators appear as an antidote to some of the thornier issues of the *moyenne durée* usage of Roman coinage into the Early Medieval period. Ceramics provide a working dating mechanism for deposits throughout the end of the Roman period (Orton, Tyres and Vince 1993). Pottery use was near universal across the Roman world and ceramics were utilised at every level of society although research has made it clear that, on average, rural sites have a smaller range in form and type than military or urban centres (Van Ossel and Ouzoulias 2000; Evans 2001; Van Thienen 2016). The decline in long-distance trade and subsequent establishment of more localised regional traditions led to the development of highly diversified localised pottery (Unverzagt 1916; Hübener 1968; Fulford 1979; Alarcão and Mayet 1990), sometimes undatable due to the lack of comparable typologies. Despite this localising element, pottery in some areas still allows for the clear dating of deposits throughout the 4th century (Oelmann 1914; Hussong and Cüppers 1972; Brulet, Vilvorder and Delage 2010) especially with the production of Mayen wares, Argonne *sigilatta* and *Moselkeramik* in Gaul (Brulet and Feller 2003). In some regions a pottery tradition continues unbroken across the end of Roman rule, with Merovingian pottery (Hussong 1936; Van Wersch 2004) succeeding the final Roman Alzei forms (Redknap 1988a). In the Mediterranean area, ceramic chronologies are almost unbroken across the course of the 5th century with *terra sigilitta* forms, primarily African and Hispanic, providing dating evidence for most sites into the 6th century (Hayes 1972; Hayes 1980). This is supplemented by a range of Late Antique forms such as *dérivée de sigillée paléochrétienne* (Raynaud 1993) and later coarse wares, such as *céramique commune kaolinitique* (Meffre and Raynaud 1993) and amphorae (Járrega Domínguez 2007), some of which have been associated with 'Germanic' groups, for example Visigothic grey ware. This issue is worth further exploration. The identification of material culture with ethnic groups has a very long history (Kossinna 1911; section 1.3.3). In the Late Roman and Early Medieval periods, this is specifically acute. 'Germanic'-style ceramics: primarily Chenet 342 *terra nigra* and Alzei 27 have long been associated with immigrants groups (*cf.* Van Thienen *et al.* 2017). In Southern Europe, a range of poorly quantified ceramics (so-called *ceramique gris*) have been identified as ethnic pottery productions. Some of these styles, based on geochemical, contextual and fabric analysis, indicate hybridising or 'Germanic'-style occupation on sites. The implications of this for this dataset are explored in each of the three regional chapters, however,

it is worth noting that the evidence base and interpretation for this primarily derives from studies into hybridising cultural styles (Van Thienen *et al.* 2017) and foodways analysis (Heeren 2017).

In some areas, ceramic use is so poorly preserved in the archaeological record that chronology problems must be solved. Final phase Roman wares, such as South-East Dorset Orange-Wiped Wares (SEDDOW) in addition to organic tempered wares (Gerrard 2010) in Britain and the Mayen form Alzei 27 (Redknap 1988a; 1988b), have been used to date more securely final Roman and sub-Roman contexts on a variety of sites.

The problems presented by the methodological issues of numismatic and ceramic evidence are not insurmountable. The ceramic indicator is relatively intact and provides an invaluable dating mechanism, except in Britain where there is a ceramic hiatus between Roman and Saxon traditions especially outside the southeast. The numismatic evidence is more fragmentary, providing only a rough model for occupation, and demonstrates significant problems when considering the reuse of Roman material culture. Despite this, it can still be used to identify sealed deposits to a broader range of dates.

2.10 THE PROBLEM OF ABANDONMENT

Traditionally, studies dealing with the transformation of Roman rural settlements have brushed very lightly over the concept and theory of abandonment. The process of site abandonment has been addressed on the macro scale (Lenz 1999; Van Thienen 2015); however, the primary focus of many studies has been directed at isolating ***transformation*** from ***abandonment*** (Van Ossel 1992, 79-84; Christie 2004, 21-23) with very little work directed towards a unified theoretical or methodological framework.

Practically, Roman archaeology has tended to implicitly follow the definition of abandonment laid out by Schiffer (1996, 89), 'the process whereby a place - an activity area, structure or entire settlement is transferred to the archaeological record'. Despite its ubiquitous use, this definition is flawed when related to the afterlife of the Roman villa. Recent work, especially in New World Archaeology, has highlighted the impossibility of a clear and simple definition of abandonment (Cameron and Tomka 1993; Stanton and Magnoni 2008, 6-9). In addition, research has cautioned against the default position of the so-called 'Pompeii Syndrome' (Schiffer 1985) which assumes little or no use of a site after the end of formal occupation and can only be realistically applied to a small minority of sites destroyed beyond all use or recovery.

Abandonment is a key element in the development trajectory of villa sites. The abandonment of sites and areas of sites is intimately tied to the transformation of rural settlement. In the majority of cases, the lines between abandoned zones and in-use areas are highly blurred and such zones do not easily fit into clear-cut definitions (Scarborough 1989, 415; Schiffer 1996, 40-44). Some of these indeterminate activities, such as stone-robbing, scavenging and partial reuse have been loosely grouped together as 'post-abandonment activities' (Schiffer 1996, 207-212). Many of these activities are identified as 'squatting' within Roman archaeology. This indicates that these buildings did not immediately enter the archaeological record, but rather continued to play a significant role in local interactions after the end of occupation. This interaction requires a new definition, rejecting Schiffer's simplistic model. This study will define abandonment as the end of formal, permanent occupation at a site, or sector of a site.

This redefinition has been guided by the presence of more advanced theoretical models in other fields of study that have guided the integration of post-abandonment activity into this project. Ethno-archaeological studies, primarily in the New World (Brooks and Yellen 1987; Cameron and Tomka 1993), have highlighted the extremely difficult process of identifying and understanding final floor level assemblages, whilst stressing that the material remains left behind only represent a partial picture of occupation. Such work has also begun to establish that a wide variety of activities occur after the end of formal occupation and can occur in both totally abandoned and sporadically used buildings. The most advanced models

have been developed in relation to Mayan archaeology, where significant work has been directed towards understanding different forms of post-abandonment activity on a broad canvas whilst also identifying different forms of abandonment and its role in the perception of buildings (Stanton and Magnoli 2008).

A similar approach must be taken in the Roman rural landscape. There is clear evidence that many of these buildings stood well into the Medieval Period (Rahtz and Harris 1956; Howell 2000). The study of interactions with these buildings has been highly simplified, partly due to their archaeological invisibility. Only in a few simple cases can abandonment be viewed as the single stratigraphic transference of the archaeological horizon into the site record. In almost every case, it is more appropriate to discuss a trajectory, or several competing trajectories, of inter-related uses and perceptions, culminating in the entry of a site into the record.

This study will take a more nuanced view of abandonment, looking at four different grades along a sliding scale, and therefore enabling the categorisation of different forms of post-abandonment activity. Abandonment can be broken down into four broadly differentiating categories, based on different types of reuse and different timescales of abandonment:

- ***Seasonal:*** Seasonal re-use is defined as the abandonment of a building for large parts of the year and its reuse for a definable period. This form of abandonment is usually seasonally tied either due to climatic reasons, for example a roofless building would be of limited use in midwinter, or for socio-economic reasons such as cyclical markets or feasting. It is generally characterised by regular, intense occupational layers separated by periods of natural depositional processes.
- ***Episodic:*** Episodic re-use represents the use of a structure on a more or less sporadic basis. It includes a broad array of less formal activities that can occur in unused or decaying buildings. These activities tend to be unplanned and irregular in timescale, with a casual or opportunistic pattern of reuse. They can range from the use of a structure as a temporary shieling for livestock or the use of an unused structure as a dumping ground, to the reuse of a building as shelter or to more generic scavenging or stone robbing. Temporally, these forms of activity can go on for centuries, specifically stone robbing, which often appear not to have been planned or directed in any meaningful way at many sites. This category covers the majority of processes, often archaeologically invisible and constitutes the largest group of post-abandonment activity.
- ***Near Permanent****:* Near-Permanent abandonment represents the reuse or reoccupation of sites after a long period of abandonment. This category of site includes settlements abandoned and reoccupied centuries later. The reuse of a Roman villa abandoned in the 5th century and reoccupied in the 8th century by a Christian centre, Tholey (Kolling 1961) is one such example. In many cases, this can include the use of building materials from the previous occupation as well as looting or pillaging of such material.
- ***Permanent:*** Simply put, this is the type of abandonment proposed by Schiffer in 1987 and represents the complete and definitive abandonment of a site, without reuse or reoccupation. It would be left as the day that final permanent occupation ended, with the site later shaped by site formation process and modern disturbance. The class of activity includes sites catastrophically destroyed, such as Pompeii and Herculaneum, and those that appear to be apparently deliberately destroyed such as the fortress at Inchtuthil (Pitts and St. Joseph 1985, 279-280). It is only really limited to buildings destroyed beyond any recovery or possible use.

Spatially, abandonment is highly complex. It has generally been applied to the complete abandonment of a site (Schiffer 1985) or as an off-key remark when addressing the end of use of certain sectors of a site, for example, *partes rusticae* (Chavarría 2007, 180 referring to L'Aiguacuit). Naturally, this fragmented and diachronic application of the term on a spatial level creates problems when attempting to interpret the meaning and implications of change at the level of an individual site. For the purposes of this study, the spatial framework for the abandonment of sites has been divided into four different resolutions, some of which are overlapping:

- ***Individual buildings:*** the abandonment of individual buildings applies the cession of occupation and permanent use of these structures for both their original and transformed purposes. This spatial category applies to a wide range of sites and includes a variety of different forms of abandonment, from the simple cession of activity to outright destruction. Examples of this include the abandonment of the main building at Aldenhoven-Niedermerz in favour of a series of wooden buildings (Lenz 1999, 126-134).
- ***Sectoral Abandonment:*** sectoral abandonment refers to the end of the use of specific zones of a villa complex. Practically, this manifests itself through the abandonment of a range of structures and features that comprise an archaeologically visible zone of use. The most common form present in this data set is either the abandonment of a main building or the productive zones of a site. Hamois-sur le Hody (Lefert, Bausier, and Nachtergael 2002) provides an example of this. The auxiliary structures around the presumed courtyard were abandoned in the early 4th century in favour of continued occupation in the main building.
- ***Site Abandonment:*** Simply, the total abandonment of a site. This implies that permanent occupation on the site did not occur after a certain point, however, it does not preclude continued interaction with the remains of the settlement. This data set includes a wide range of examples, including a large corpus of data from *Germania Secunda*, where a pulse of site abandonment has been noted in the second half of the 3rd century AD.
- ***Landscape Abandonment:*** The highest resolution level applied in this study is the total abandonment of both a villa complex and its surrounding landscape. This category of abandonment applies to sites where there is both a sharp break in occupation and an apparent disengagement with landscape management. Naturally, this requires well-excavated sites to be confidently applied, however, it can be inferred by evidence from sites; for example, the abandonment of a group of sites in the same region is strongly suggestive of a lower level of human interaction with the surrounding landscape and can be argued to be an abandoned landscape. On the level of the individual site, examples of this are relatively rare; however, the well-excavated but poorly published site at Welton (Mackay 1999) is indicative of the abandonment of the wider landscape in the early 5th century.

Chapter 3 - *Britannia*

3.1 GENERAL INTRODUCTION

This chapter examines the regional trajectory of transformation and abandonment of Roman villas in *Britannia*. The chapter will start by introducing the rural landscape and regional history background. After this, it will set out the spatial and temporal distribution of change and analyse the morphology of transforming villas within three provinces of the Late Roman diocese.

3.2 THE ROMAN RURAL BACKGROUND

Britannia comprised a series of highly diverse geographical zones (figure 3.1). Three geographical areas of the island have been selected for this study: the territory between the River Humber and Hadrian's Wall, the southwest of England and the southeast of England. The three regions chosen for this study cover a variety of Roman rural landscapes and provide the widest possible spread of data. The study regions, roughly corresponding to the Late Roman provinces of *Britannia Secunda*, *Britannia Prima* and *Maxima Caesariensis* (figure 3.2) examine sites in both upland areas and in the fertile lowlands.

Data collection in *Britannia* has been aided by a project begun in 2006: *New Visions of the Countryside of Roman Britain*. This large-scale project incorporated significant data collection and GIS study and has produced three large volumes (Smith *et al*. 2016; Allen *et al*. 2017; Smith *et al*. 2018). Despite significant methodological problems, it provides the most complete view of the Roman rural landscape in Britain. The Roman landscape has generally been divided into two distinct regions: an upland zone, dominated by traditional enclosures, indigenous round houses and military fortifications and a comparatively light occupation density (Taylor 2007, 30), and a lowland sector consisting of more enclosed land, rectangular buildings and villa landscapes supported by Romanised land management systems (Taylor 2007, 71-72; Smith *et al* 2016, 15-16).

The villa landscapes of the island are concentrated in the south and east of the island with significant groups of outliers in the southwest of the diocese. The Late Roman rural landscape was set within a clear settlement hierarchy, secondary centres, villas and farms were overlaid by a tier of intermediate sites. Farms and complex farmsteads provided the bulk of rural settlement in *Britannia* and generally consisted of non-Romanised architecture (Allen and Smith 2016, 20-32). The villas acted within this framework as nodes for agricultural exploitation and cultural display although their place in the settlement hierarchy is understudied. Supplementing this was a range of settlements generally referred to as *agglomerations secondaires* on the continent. This group of sites remains poorly studied and larger nucleated settlements may have acted as a poorly understood interface between the urban and rural spheres (Allen and Smith 2016, 37-42). Larger rural settlements and fortified small towns such as Catsgore (Leech and Arthur 1982) and Shepton Mallet (Birbeck 2002) likely acted as industrial and transportation hubs with some performing some sort of official purpose. These nucleated settlements are postulated to have acted as stimulators for rural economic production and interfaced between the state and rural society (Smith *et al* 2016, 39-41). There has been some suggestion that they served as markets for villas to engage in selling their surplus or acted as official collection points for produce and taxation (Hingley 1989, 90-91; Brindle 2017, 242-

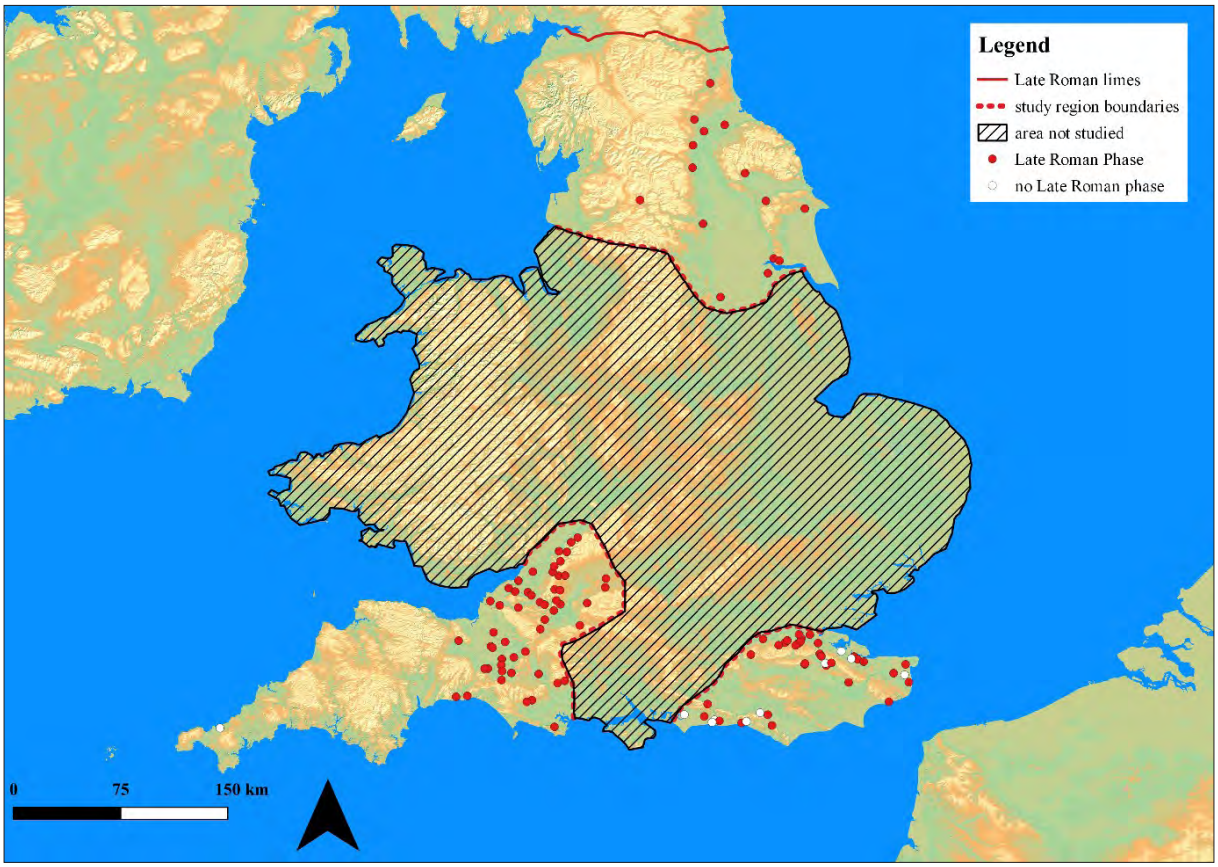

Fig. 3.1: Excavated villa sites in the British diocese differentiated by presence/absence of a Late Roman occupation phase (J. Dodd).

243). These settlements developed as a response to widespread changes in land management resulting from the villa expansion of the 3rd century and grew in status as the large intra-provincial centres and *civitas* capitals declined in economic importance, although the administrative elements of these urban centres remained (*cf.* Rogers 2012, 6-8; Speed 2014, 100-102). However, our understanding of this is deeply flawed primarily due to a research emphasis on the resident main building of villa complexes, to the detriment of the investigation of ancillary structures and the wider landscape. Only in a few cases, such as Welton (figure 3.3), has this been undertaken.

The villa landscape has been interpreted as being arranged around major urban centres with, for instance, 27% of villa sites identified in the *Rural Settlement of Roman Britain* project as located within 20km of major conurbations (Smith *et al* 2016, 418, fig. 12.25. This interpretation rests on the assumption that villas represented the rural retreats of the curial classes (Percival 1976, 145-146) and that they surrounded the towns in this role (Hodder and Millett 1980). Later research however has suggested that more economic factors, driven by supply and demand (Millett 1990, 193-197) may have played a more important part.

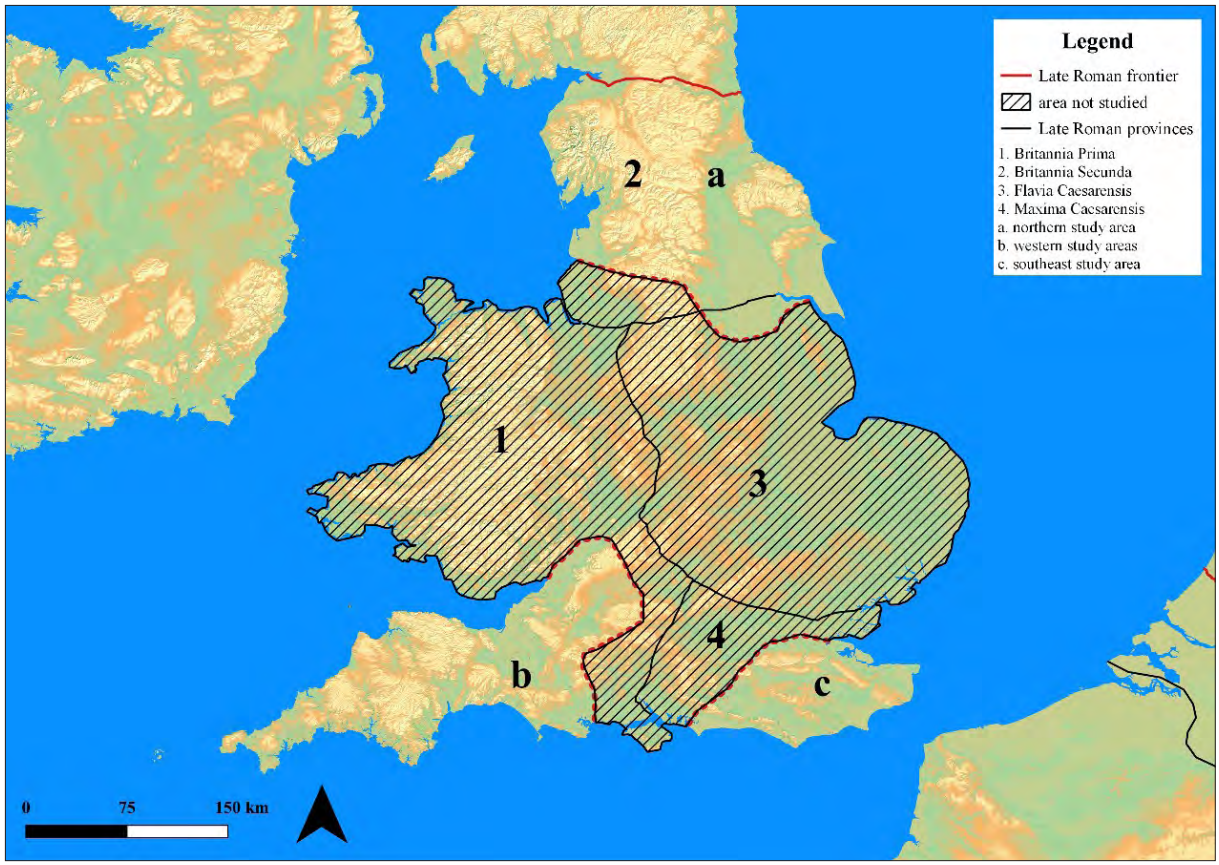

Fig. 3.2: The Diocese of Britain c. AD 350 set against the study areas (adapted after White 2013, 587, Fig. 3).

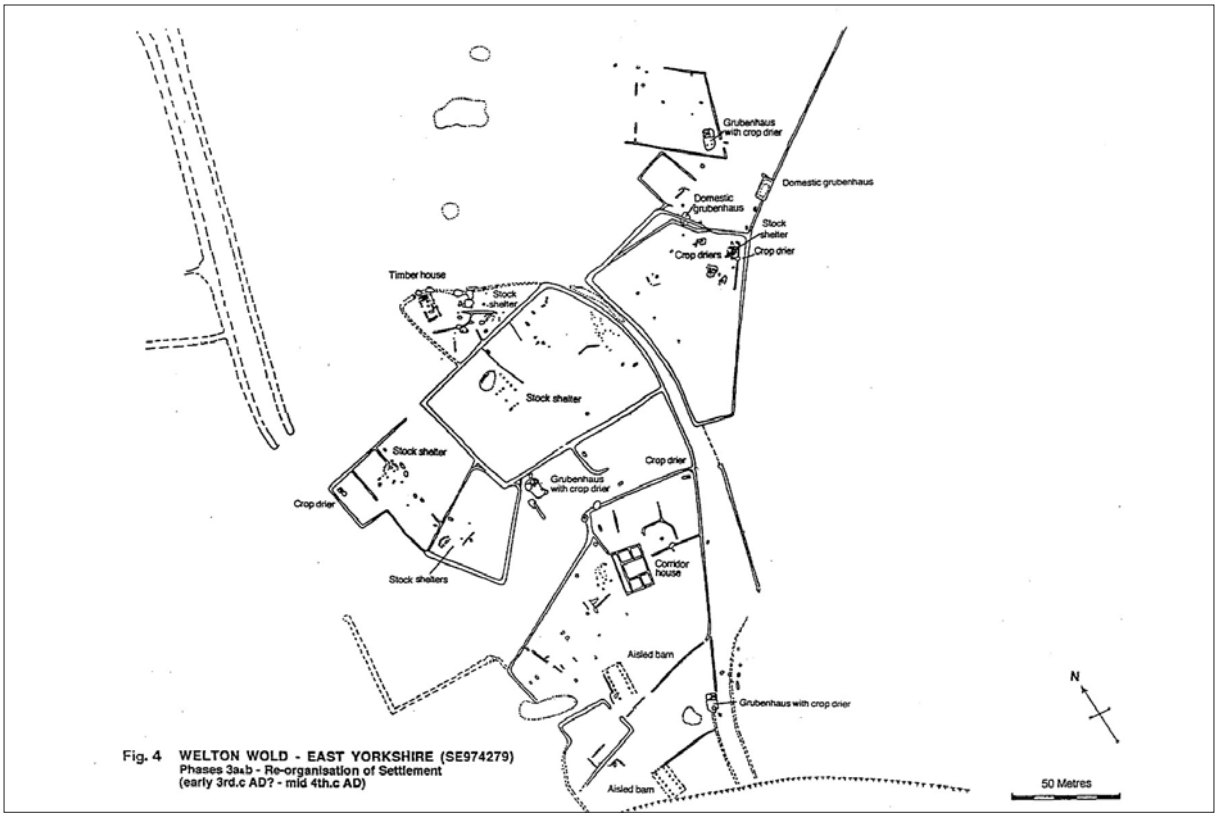

Fig. 3.3: The Welton villa complex in the 3rd and 4th centuries AD (Mackey 1999).

3.3 HISTORICAL BACKGROUND

During the period under study, Britain drifted from an integrated part of the Western Empire, tied into the tax-pay system and home to a significant percentage of the Roman military, to a highly fragmented socio-political landscape of small polities, some of which were of immigrant origin. Isolated by the English Channel, *Britannia* survived relatively intact from the 3rd century crisis, suffering neither major barbarian raiding nor civil wars. The Roman army in *Britannia* supported the breakaway 'Gallic Empire' of Postumus and his successors, although to what extent is unclear, and there appears to have been strong regional support for the so-called 'British Emperors', Carausius and Allectus (Salway 1980, 220-226) at the end of the 3rd century.

Despite the politically benign climate, the island was affected by the reorganisation of economic patterns in the 3rd century (Fleming 2010; Millet 1990, 127-130). The breakdown of long-distance trade resulted in increasing localisation and regionalisation of resources, in turn intensifying the transfer of economic power from the core to the provinces and prompting industries dependent on intra-provincial economic movement to go into decline (Esmonde Cleary 2013, 28-30). Archaeologically, this is manifested in the growth of regional industries, especially ceramic production (Fulford 1979; Millett 1990, 165-174) in the course of the late 3rd and 4th centuries with *Britannia* almost self-sufficient by the middle of the 4th century.

Britain was divided into four provinces, eventually grouped under a *vicarius* based in London (White 2013, 587, figure 3; figure 3.2) at the beginning of the 4th century as part of a wider set of reforms under Diocletian. Significant but poorly understood campaigns (Collins 2012, 13-16) were mounted in northern Britain by Constantius Chlorus in the early 4th century to stabilise this new system of governance and reassert central control after the usurpation of Carausius and Allectus. In 306, Constantine the Great was proclaimed emperor at York leading to a round of destabilising civil wars. Despite this, much of the province maintained a degree of peace and in places experienced a 'golden age' of villa construction and renovation (Rivet 1969, 201-203; Scott 2000, 168-170; Gerrard 2013, 136-140). Problems mounted over the course of the second half of the 4th century required direct central intervention in 343, 367-368 and 396-399 as well as a major usurpation crisis in 382-383 (Gerrard 2013, 19-26), possibly resulting in the creation of a new province: *Valentia* (Dornier 1982). The island slowly drifted out of the Roman orbit in the 5th century with new coinage ceasing to arrive in significant quantities after 402 (Brickstock 2000, 35).

In 407, the army in Britain created three usurpers in rapid succession: Marcus, Gratian, and Constantine III (Esmonde Cleary 1989, 136). The last of these, Constantine III, was the only one who survived long enough to act on a wider scale. The chronology of much of this is disputed (*cf.* Kulikowski 2000) although it seems that Constantine III crossed over into Gaul soon after his acclamation, likely with the *Comes Britanniarum*, leaving only a skeleton force of *limitanei* (Jones 1991, 316; Collins 2017, 206) with possible units of *foederati* (Halsall 2012) in the diocese. This usurpation was tied up with already existing problems for the central state, including a possible revolt of *bagaudae* in *Britannia* and *Armorica* and the incursion of groups of Vandals, Sueves, and Alans across the Rhine in 405/406 (Kulikowski 2000, 331). It appears that *Britannia* and parts of northern Gaul rejected Constantine III's control and took government into their own hands (Drinkwater 1998, 285; Zosimus 6.5.2). Britain did not receive any officials from the central government after the end of the early 5th century crisis and subsequently the diocese was not reintegrated into the empire, with 410 seen as the traditional date for the end of Roman Britain (Millett 1990, 217; Gerrard 2013, 249-252). Late Antique traditions survived in the face of increasing Anglo-Saxon immigration into the province, eventually being pushed westward and surviving only in the less Romanised societies on the fringes of the islands. There is, however, a question of why *Britannia* is included in the *Notitia Dignitatum*, the list of military and civil offices compiled in c. 423. This problem remains unsolved and presents something of an issue when modelling the end of the Roman period in Britain (Collins 2012, 38-39; Collins 2017, 207-208 for discussions).

3.4 TRANSFORMATION ANALYSIS

This chapter primarily consists of an analysis of villa transformation in the diocese of *Britannia*. It covers a discussion of broad general trends of abandonment and reoccupation as well as detailed analyses of the individual facets of transforming villa complexes. The data set for *Britannia* consists of 113 sites spread out across three areas of the diocese highlighted in figure 3.1, with 100 of these sites displaying a Late Roman occupation phase and transformation in the Late Roman and Early Anglo-Saxon periods.

3.4.1 GENERAL TRENDS

A number of significant general and regional trends can be drawn out of the data set. Primarily these are related to long-term trends of abandonment and reoccupation on a broad intra-provincial scale.

3.4.1A REGIONAL ABANDONMENT TRENDS

The steep decline in occupation rates from the late 4th century onwards has long been noted in scholarship of rural settlement with a 'cliff-edge' of Romanised occupation identified in the first decade of the 5th century (*cf.* Millett 1990, 219-222; Gerrard 2010, 293; figure 3.4). Despite this apparent clarity, the dating evidence for this is extremely difficult to pin down for the period (see section 2.6 for a summary; *cf.* Gerrard 2013, 11). The end of the villa landscape has been explicitly tied to the collapse of the Roman economy in Britain (*cf.* Gerrard 2013, 83) and it probably represents the wholesale reorganisation of rural society as *Britannia* left the Roman tax-pay cycle. This cliff-edge sets the course of occupation in *Britannia* apart from other provinces and marks out a radically different regional trajectory, indicating the presence of factors that are not present in other regions.

The steep decline observed in figure 3.4 represents the statistical culmination of a background abandonment rate increasing from the middle of the 4th century onwards. This increase reaches a peak from the last quarter of the 4th century and into the first decades of the 5th century, paralleling the breakdown of Roman socio-political structures in the diocese. Only at a handful of sites, notably at Dinnington and Frocester in *Britannia Prima*, is there anything like long-term continuity of occupation and even in cases such as these, habitation is not postulated beyond the late 6th century. The swift collapse of the rural fabric at the end of the 4th century is complemented by an earlier spike in site abandonment.

Over the course of the second half of the 3rd century, a moderate decline in villa occupation is evident in *Maxima Caesariensis*. This pattern coincides with the reorganisation of the socio-economic fabric in the second half of the 3rd century. This stands in contrast with other regions of the diocese, where villa occupation rates generally remained stable or increased over the course of the late 3rd and early 4th centuries. Although villa settlement recovers in *Maxima Caesariensis* by the middle of the 4th century, all three regions enter a terminal decline in occupation rates from the 350s onwards. The retreat of villa landscapes in late 3rd century *Maxima Caesariensis* has been linked to several events. Traditionally it was associated with Saxon seaborne raiding (Winbolt 1932, 31-32; Rudling and Leigh 2013, 27). The return of stability and the recovery of settlement density in the early 4th century was tied to the increased security of the early Saxon Shore forts, notably at Portchester, Pevensey and Richbourgh (Johnson 1970, 240-241; Rudling and Leigh 2013, 27). Modern analysis has placed more emphasis on changing environmental factors, primarily the inundation of the coastal Sussex Plain (Gilkes 1993, 3-4). This flooding has been associated with the sea level change felt across the North Sea as part of the Dunkirk II transgression phase.

These two peaks, referred to earlier consist of a first smaller 3rd century upswing and a second high spike in the late 4th and early 5th century. This regional trajectory marks Britain out as distinctive in the

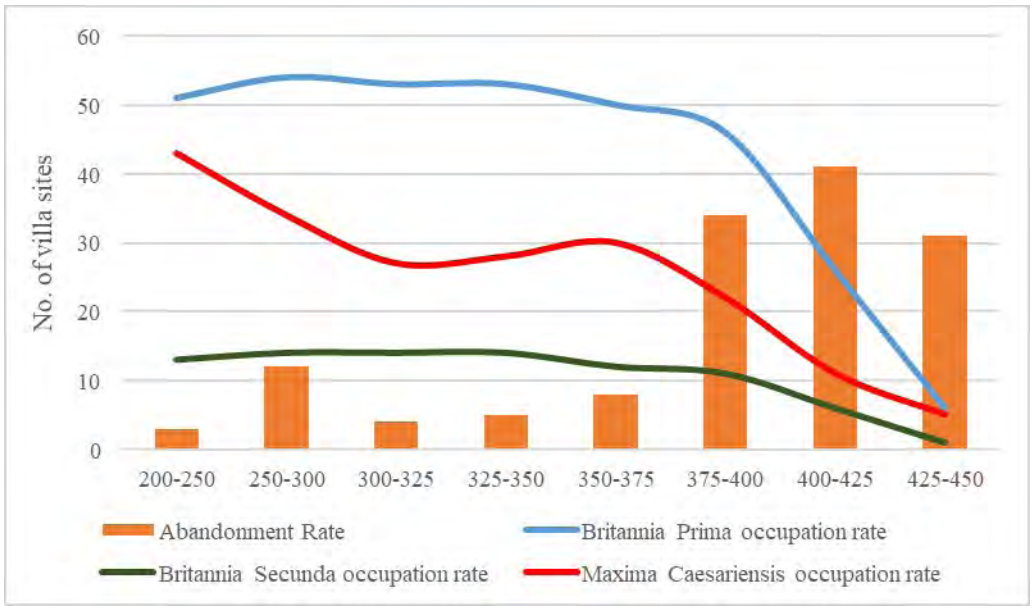

Fig. 3.4: The Late Roman villa abandonment curve set against the provincial occupation rates for villas, where data is available (J. Dodd). (*n*=107).

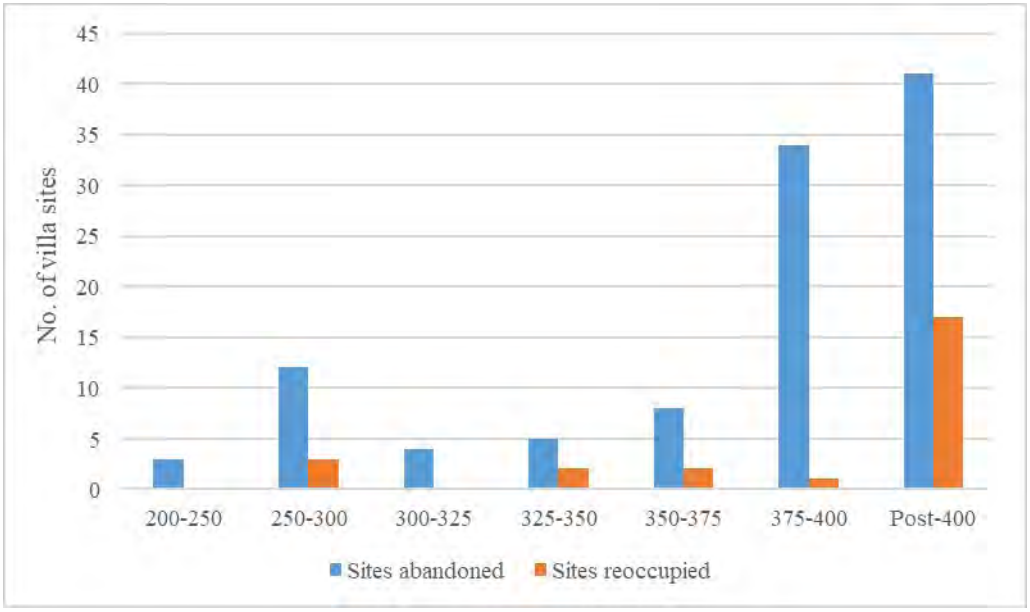

Fig. 3.5: A breakdown of villa sites by end of primary use phase and start of secondary use phase at those sites where data is available in the British provinces (J. Dodd). (n=107).

transformation and eventual collapse of the villa landscape. Figure 3.4 illustrates the background rate of abandonment present in the British data set. This rate, simply defined as the abandonment of settlements, has been adapted from ecological theory. It simply relates to the small-scale abandonment of settlements for a variety of reasons, for example nucleation of settlement patterns, land sales, or imperial expropriation of land. This background rate is present throughout the period under study, contrasting sharply with the case from the Germanic provinces and *Belgica* laid out in figure 4.3.

The continuous abandonment rate is the norm, even during the so-called 'golden age' of Roman villas in Britain (De la Bédoyère 1999) and suggests that the 4th century boom represents the exponential wealth accumulation by a select minority of sites rather than a widespread phenomenon. The Late Roman villa landscapes of *Britannia* were framed by two peaks of abandonment; a regional 3rd century spike in *Maxima Caesariensis*, likely part of the wider reorganisation of settlement in the northwestern provinces, and the collapse of the rural fabric from the late 4th century onwards with the majority of sites falling out of permanent use by c. 420.

3.4.1B REGIONAL REOCCUPATION TRENDS

The widespread abandonment of villa centres in Late Antiquity does not necessarily preclude their later reuse and reoccupation (see 2.10). There is repeated evidence throughout the 4th century of a small-scale reoccupation of abandoned villa sites. It is clear that late 4th and early 5th century rates of abandonment far outweigh the increasing trajectory of small-scale villa reuse over the course of the 4th century (figure 3.5). Only in the second half of the 3rd century, and primarily in *Maxima Caesariensis*, is there any statistically significant peak of reoccupation. This is similar to patterns observed in *Germania Secunda* and parts of *Belgica* as part of the general recovery of settlement following the crisis of rural settlement (figure 4.4) and represents a degree of rural recovery in *Maxima Caesariensis*.

The collapse of the villa landscape highlighted in the last quarter of the 4th and early 5th centuries is accompanied by a strong increase in the reoccupation of abandoned villa centres. This increase spikes after the formal end of the Roman diocese and has generally been associated with the arrival of 'Germanic' migrants from the continent. This generally takes the form of reoccupation by groups using broadly 'Germanic' styles of architecture, such as *Grubenhäuser* and using a blend of Late Roman and Anglo-Saxon material culture, for example, repeated finds of ES1 to ES4[6] Saxon pottery in reused villa contexts, sometimes in conjunction with final phase Roman coinage, ceramics and artefacts. Despite this, there is low-level background reoccupation of villas throughout the course of the 4th century, primarily related to the recovery in *Maxima Caesariensis*. These are related to the increasing agricultural capacity of the diocese further explored in section 3.4.3b and broadly fit with the evidence for sustained reuse and expansion of field systems noted in *Britannia Secunda* and the increasing nucleation of rural settlement (Hodgeson 2012, 52-55).

3.4.1C REGIONAL TRANSFORMATION TRENDS

The importance of the late 4th and early 5th centuries to the transformation of the British villa system is laid out in figure 3.6 and it supports the data explored in sections 3.4.1a and 3.4.1b. Statistically significant peaks in the percentage of sites entering transformation trajectories coincide with periods of socio-economic stress. This is neatly illustrated by the situation in the second half of the 3rd century: 70% of sites entering transformation are located in *Maxima Caesariensis*, corresponding with a known period of rural reorganisation and abandonment in the villa landscapes of the province. A significant minority of sites; primarily located in the southeast, experience transformation from the middle of the 3rd century, in some cases prior to temporary abandonment phases. At least one site, the major villa complex at Lullingstone (Meates 1979), experienced functional change in the late 2nd or early 3rd century. This pattern, mirrored in Northwestern Europe, suggests that structural problems in the Roman economy were embedded from the 3rd century onwards and may have had a knock-on effect on wealth, productivity, and the tax-pay cycle.

[6] Early Saxon Wares 1 to 4

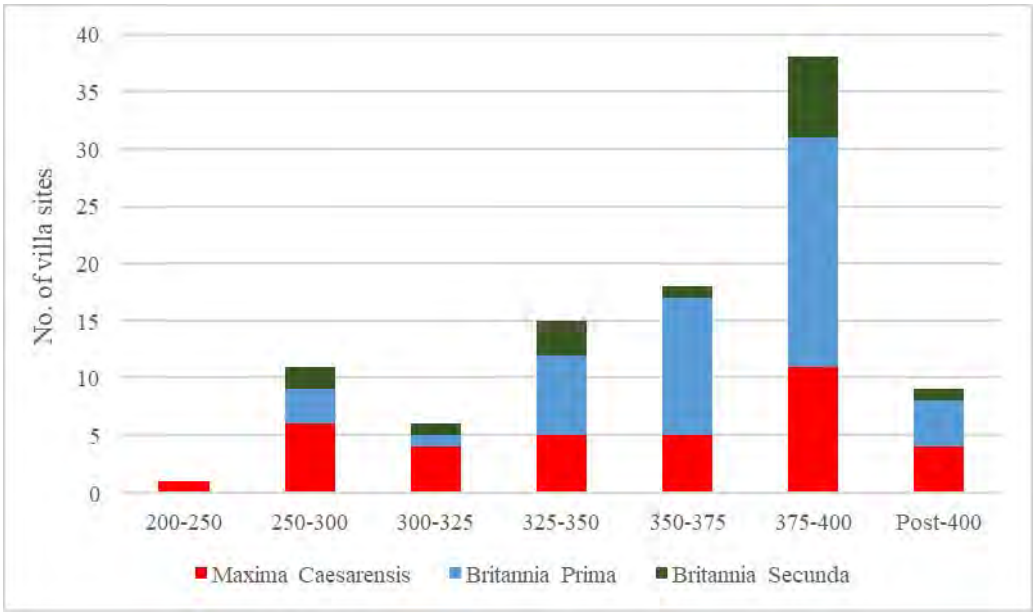

Fig. 3.6: A breakdown of first appearance of transformed occupation at villa sites where data is available in the British provinces (*n*=98) (J. Dodd).

Transformation is a phenomenon present throughout Late Antiquity; for the most part this background transformation rate is statistically small-scale. This is typified by *Britannia Secunda*, where small-scale change is apparent from the second half of the 3rd century onwards, although there is a notable peak in transformation in the last quarter of the 4th century. This peak in activity somewhat vindicates the traditional view that transformation represents a phase of no consequence before final abandonment. Despite this, figure 3.6 also demonstrates a little studied feature of transformation in *Britannia*: the long-term 4th century upswing in transformational activity. The 4th century has generally been seen as a golden age for villa settlements in *Britannia* (Rivet 1969, 201-203), although clearly this was not a uniform trend, with occupational change from the second quarter of the 4th century onwards. The increasing amount of transformation across the diocese may represent smaller sites that lost out to larger villas or were incorporated into larger estates and played a role in the consolidation of landholding noted in the Late Antique period. This has been postulated for parts of Northeastern Spain (Chavarría 1996; Chavarría 2004, 69-70, 76) and the same may hold true for Late Roman Britain (*cf.* Dark 2000).

3.4.2 HABITATIONAL TRANSFORMATION

Habitational transformation, in line with all other study-regions, is the most common form of change present at villa complexes in *Britannia*. There are 79 sites, spread proportionally through all three of the study areas, which show evidence of habitational reuse, reoccupation or altered function. Morphologically, this includes a wide range of activities: from simple occupation levels and installed hearths to more elaborate domestic arrangements and a group of sites with new timber styles and designs.

Fig. 3.7: Poor repairs, highlighted in red, to the mosaic pavement at Hinton St. Mary dating to the late 4th or 5th centuries (adapted after White, in Toynbee 1964, 7).

3.4.2a HABITATIONAL MORPHOLOGY

Morphologically, the evidence from *Britannia* is dominated by the reuse of existing structures with reoccupation and altered functions more common than the construction of new timber building at sites (table 3.1). The disparate nature of this makes it difficult to assess the morphology of habitational features in the archaeological record; however, a number of trends can be established in the data set.

site type	number of sites
Primarily new constructions	17
Primarily existing structures	60
Unknown	2

Table 3.1: A breakdown of habitational transformation at villa sites by type of occupation (J. Dodd).

Three different forms of change have been noted for the British provinces: renovation, in the form of seemingly clumsy repairs to structures or features, functional alterations to rooms, with hearths and domestic ovens repeatedly inserted into former reception rooms, for example at both Great Witcombe, where both wings appear to have been reutilised as habitational zones (Leach 1998) and Lufton, where sub-division of rooms is common (Hayward 1952, 1972) and the presence of new wooden buildings.

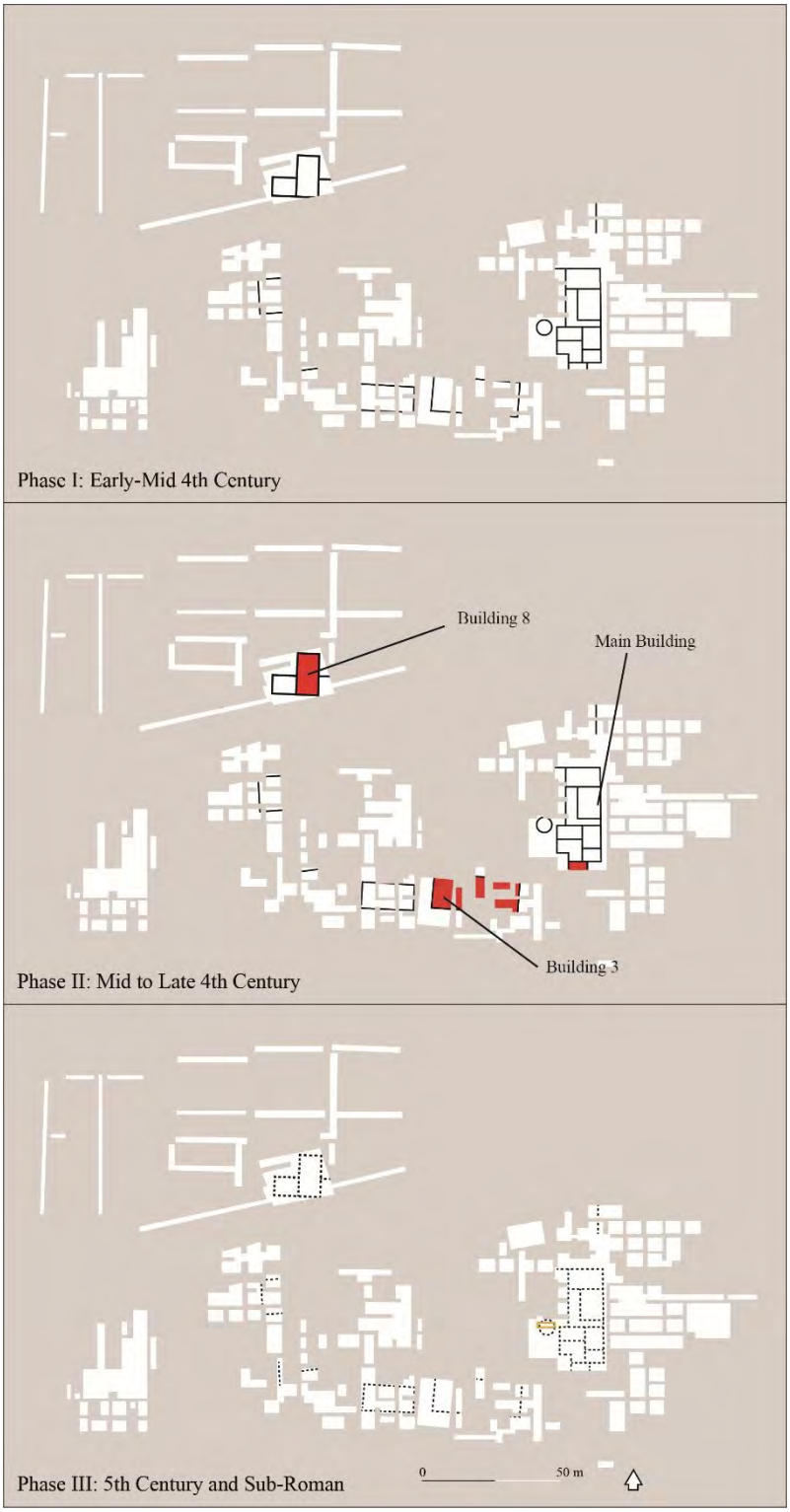

Fig. 3.8: Phased occupation at Rudston in the Late Roman period showing the shift of habitational occupation, highlighted in red, from the main house to Buildings 8 and 3 (J. Dodd).

a) Renovation

Renovation is a continual process to the built fabric of villa structures in Late Antique *Britannia*. Archaeologically, this primarily takes the form of the apparently clumsy patching of mosaics and flooring. Examples of this are widespread with lime slurry mixes used to patch mosaics at Druce Farm (Ladle 2014)

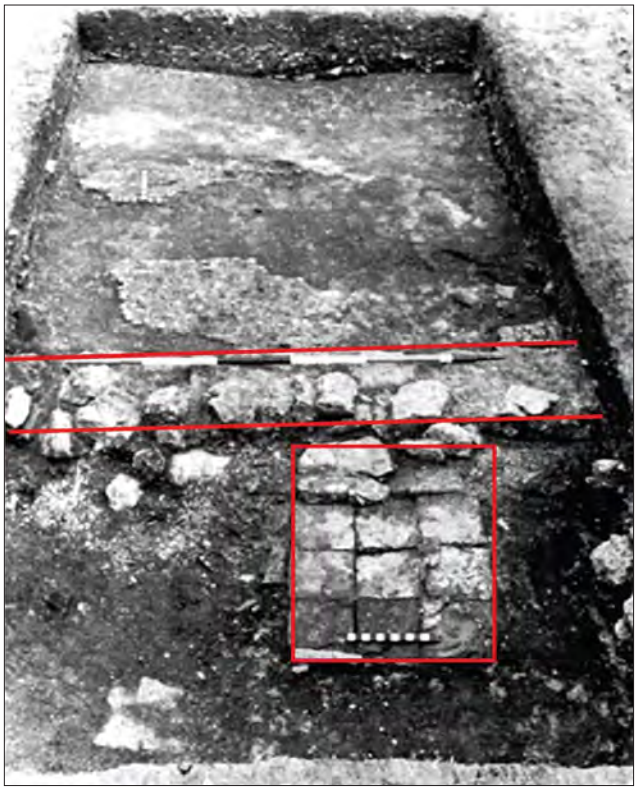

Fig. 3.9: Alteration and renovation within the villa structure: a late 4th century tile hearth and a sub-dividing wall, highlighted in red, overlying a high-status pavement in rooms 90/91 at Eccles (Dodd, adapted after Detsicas 1968, 44, Plate VIII).

and Frocester Court (Price 2000a). The most important example of this is Hinton St. Mary (Painter 1967), where the *chi-rho* pavement appears to have been poorly repaired with lime slurry and roofing tiles in the late 4th or 5th century (figure 3.7).

Renovation of high-status features in this way is a difficult phenomenon to assess. Superficially, it is suggestive of a possible rejection of Roman socio-cultural norms, such as mosaic paving. Poor repairs to these features would indicate that villa-owners, at least in some parts of the diocese, may have given repairs a lower priority, especially considering the presence of very late mosaic workshops, and their associated repair and maintenance infrastructure, in *Britannia* (Ling 1997, 264-269). However, poorly executed repairs to mosaic pavements does not preclude the use of a room for its original purposes. Equally, partial repairs do not detract from the visibility of the art in the same way that a new floor level does (see figure 2.2 for an example). Consequently, the important and role of renovated structures can be debated and little can be said based simply on the basis of mosaic repair alone.

b) Alteration

The dominant morphological group of habitational transformation in *Britannia* relates to the reoccupation, reuse and alteration of existing villa structures (table 3.1). This form of change generally centres on older structures such as the main house, for example at Eccles (Detsicas 1968), where habitational change was confined to the south range and comprised the removal of mosaics and the insertion of pits and hearths on tessellated pavements (figure 3.9). In a lesser number of cases, this activity is concentrated on ancillary buildings, for example at Rudston (Stead 1980), where mid-4th century activity appears to have been concentrated in buildings other than the former main house (figure 3.8).

Transformation at 77% of habitational changing sites in Roman Britain is concentrated in existing structures and it is present in all three of the study areas of the diocese with a 100% presence in *Britannia Secunda* (figure 3.10). This level of reuse is relatively high when compared to the percentages of reuse as opposed to new constructions in *Germania Prima* and *Secunda* and *Belgica* (table 4.1) and reflects the high degree of continuity of villa structures in *Britannia* as opposed to that in the northwestern provinces on the continent.

The situation on the near continent appears at the odds with the archaeological evidence in *Maxima Caesariensis*. Early Saxon material culture and occupation in Kent and Sussex appears to have been characterised by a high degree of reuse and alteration rather than the construction of new buildings. There is repeated evidence in this data set for the reuse of Roman buildings in the 5th and 6th centuries by Saxon groups, dated by the presence of Early Saxon Ware 1 pottery and early Leeds-type fibulae, for example at

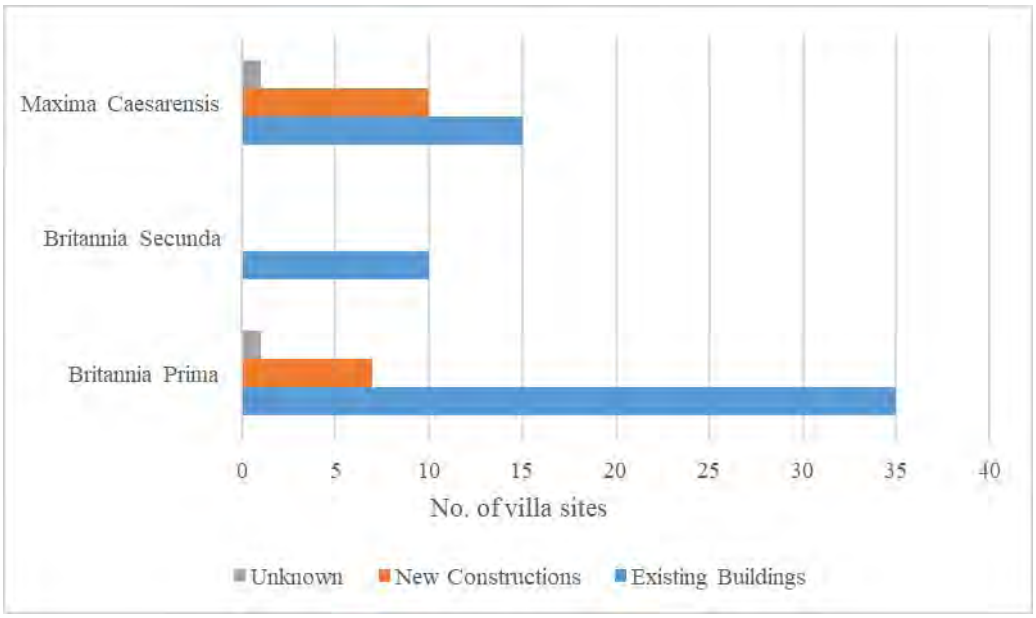

Fig. 3.10: Breakdown of habitational transformation at villa sites by type of occupation and province (*n*=79) (J. Dodd).

Deerton Street, where stylistically Saxon material was recovered in the aisled building between the mid-5th and mid-6th centuries AD (Wilkinson 1997; 2009). The repeated reuse of villas in *Maxima Caesariensis* demonstrates the influence that the existing Roman agricultural pattern had on the location and movement of Saxon immigration in the 5th century, influencing later rural settlement in a way not apparent in Northwestern Gaul. It also indicates that there was no taboo about using existing Roman structures for either habitation, as at Deerton Street or for more productive functions, such as the ES1 kilns inserted into the octagonal bath house at Bax Farm (Wilkinson 2012). This suggests there was a lack of a social taboo amongst Saxon immigrants in *Britannia* concerning the reoccupation of standing structures.

c) New wooden constructions

There is a division between new constructions of primarily timber buildings, often in a different style and the altered function or reoccupation of already standing stone structures. Habitational transformation in *Britannia* is overwhelmingly dominated by a strong traditional of domestic continuity with new structures typifying a relatively uncommon feature of change, especially in *Britannia Prima* and *Britannia Secunda* (table 3.1).

The presence of new wooden buildings at some sites is generally confined to *Maxima Caesariensis* with a smaller group of scattered sites in *Britannia Prima*. *Maxima Caesariensis* is dominant in this aspect of the data set with 58% of sites located in Southeast England (figure 3.10). Figure 3.10 also highlights the invisibility of wooden construction in *Britannia Secunda*, where reoccupation appears to have been confined solely to the alteration of existing structures or the construction of new stone buildings.

The shift from stone to wooden construction at villa sites has long been characterised as evidence of immigrant Saxon communities living in areas of the former Roman provinces. Unlike the case in Northwestern Gaul, these buildings are not architecturally diverse. Myncen Farm (Sparey Green 2007) typifies this architectural homogeneity. The site consists of a courtyard villa with mosaics and a bath block that was demolished in the second half of the 4th century. The rubble was utilised in the late 4th or early 5th century as a platform for a large post-built structure serving as the focus for activity into the 6th century. *Grubenhäuser*, often referred to as sunken-feature buildings (SFBs) in English literature (Heidinga and Offenberg 1992, 61) are generally spatially limited to *Maxima Caesariensis*. Key examples of this come from Keston,

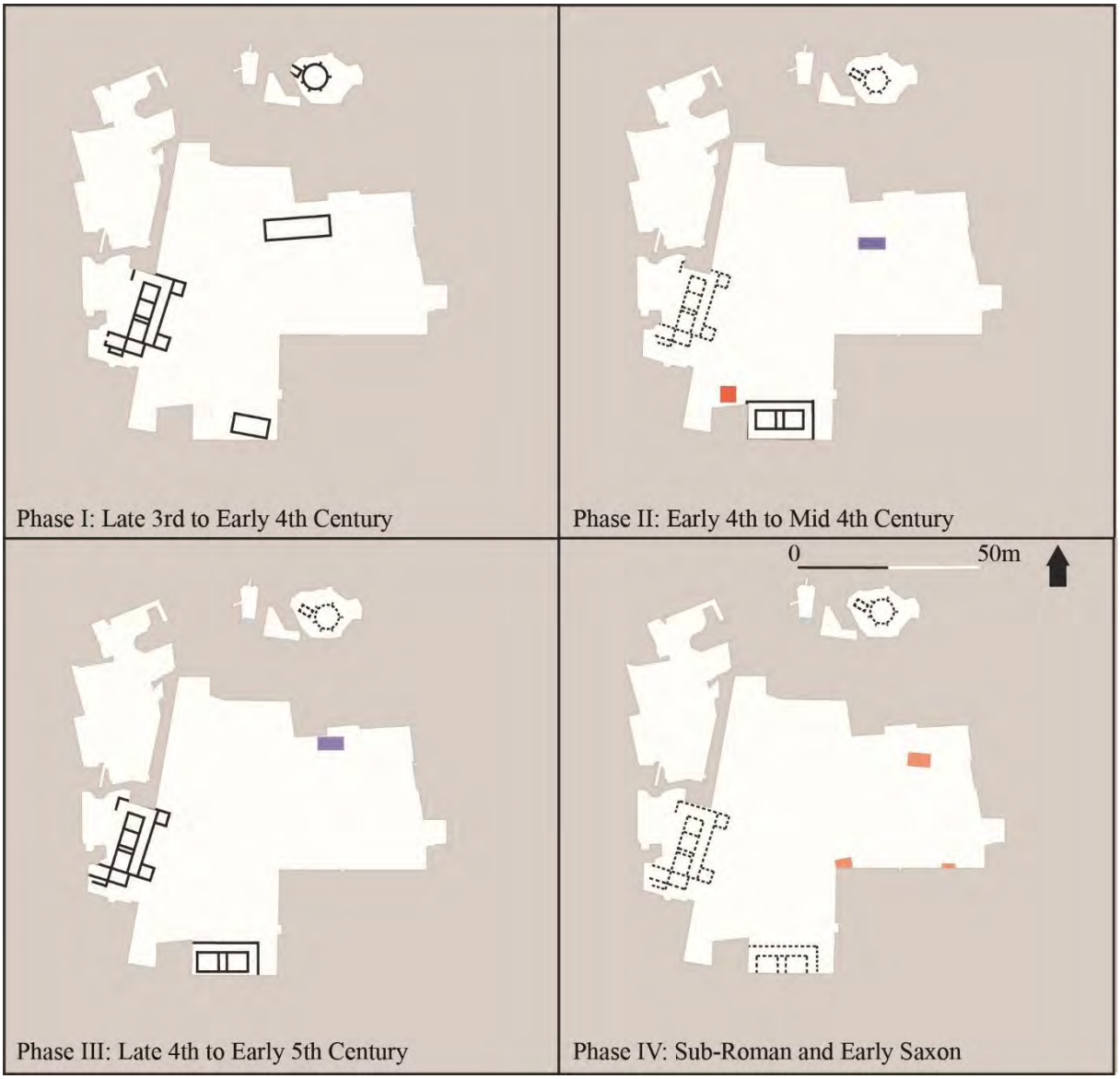

Fig. 3.11: New styles of construction at transforming villa sites: late 4th and 5th century occupation at Keston, showing the mid-5th century *Grubenhäuser,* highlighted in red, set against the 4th century villa buildings. (Dodd adapted after Philip 1991, fig. 70).

where mid-5th century occupation, both habitational and productive, is concentrated in two or three SFBs (Philips 1991; figure 3.11) and Frank's Hall, where intense Saxon activity took place to the south of the main building (Philips 2009). Unlike the case in Northwestern Gaul, wooden buildings in *Britannia* tend to be located on the rubble platforms of former Roman structures, possibly due to a greater emphasis on social-political aspects such as a need to control or exploit former seats of local and regional power over rural populations in the way not present or required in the depopulated regions of *Germania Secunda*. The immigrant nature of these structures is highlighted by the 'Germanic' style of the material culture. Early Saxon pottery, including ES1 and ES2 broadly date many of these new building designs to the middle of the 5th century, with some sites, such as Deerton Street demonstrating further evidence in the form of fibulae and combs (Wilkinson 2009, 35). The confined presence of these buildings to *Maxima Caesariensis* seems to suggest some form of 'Germanic' origin and suggests that Saxon groups were reutilising villa terrain for their own purposes, either with the tacit consent or expulsion of their original owners, for example through evidence of continuous occupation or after periods of abandonment

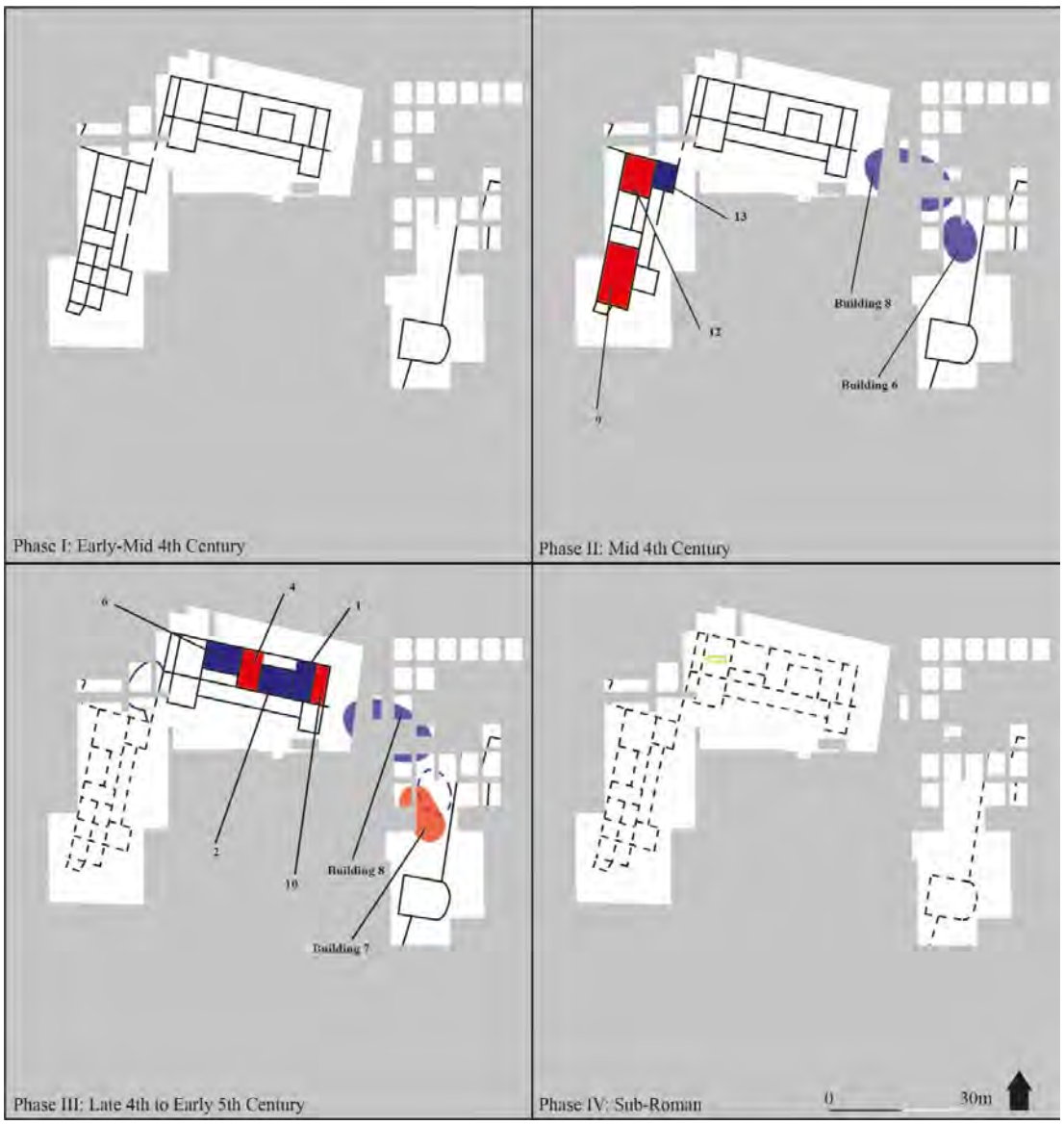

Fig. 3.12: An example of ovoid buildings at a transforming villa site: sub-rectangular buildings (Buildings 6, 7 and 8) constructed at Beadlam in Phase II and III (J. Dodd adapted after Neal 1996, fig. 1).

d) Circular and ovoid constructions in Late Roman Britain

A final important morphological trend in *Britannia* concerns the reversion from Romanised square or rectangular buildings to circular or semi-circular architecture, typologically similar to pre-Roman designs of the traditional roundhouse. Circular forms persisted into the Late Roman period in poorly Romanised areas of the diocese; however, it makes a reappearance in more connected regions from the end of the 4th century onwards. From the late 4th century, especially in *Britannia Secunda*, there is a trend towards the construction of new ovoid or circular structures (figure 3.12). These buildings are usually devoid of finds, with no real indication of their use. Interpretations have differed with some being seen as mill-like structures (Kirk and Corder 1932) and others as habitational buildings (Neal 1996; figure 3.13). This trend is not only visible at villa sites but forms part of a larger pattern of change. Non-villa sites also display similar trajectories, for example the nucleated settlement at Crossgates (Rutter and Duke 1958), where reversion to circular architecture predates the Anglo-Saxon phases of the site.

Fig. 3.13: Building 3 at Beadlam, sub-circular architecture in the Late Roman period in *Britannia Secunda* (adapted after Neal 1996, 31, Fig. 25).

This developing tradition is not really found elsewhere. The structures bear little similarity to Anglo-Saxon building tradition in that they do not resemble longhouses, nor do they appear to be found in conjunction with *Grubenhäuser*. Similar shapes do appear from the 450s onwards on the North German Plain (Huijbers 2018), although it is difficult to reconcile this primarily wooden style with the well-built stone structures present in *Britannia*. The only similar site in other regions is the very poorly understood site at Villers-Semeuse, where Late Roman ovoid buildings are mentioned (Doyen and Lemant 1983). This shift from rectangular or square constructions towards circular or ovoid buildings has not been studied in detail and a great deal of further quantification on a range of rural sites is required for meaningful conclusions to be made.

3.4.2B DISTRIBUTION AND DENSITY

Within the diocese, the ratio of habitational transformation is unequally spread with 56% of sites displaying this evidence located in *Britannia Prima*. This is partly due to the differing size of the three surveyed sub-regions, although collection and excavation biases as well as Roman landscape patterns do play a role. However, this inequality cannot be said to be a significant distinction of regional variation. Overall, nearly 70% of sites in *Britannia* demonstrate some form of habitational transformation.

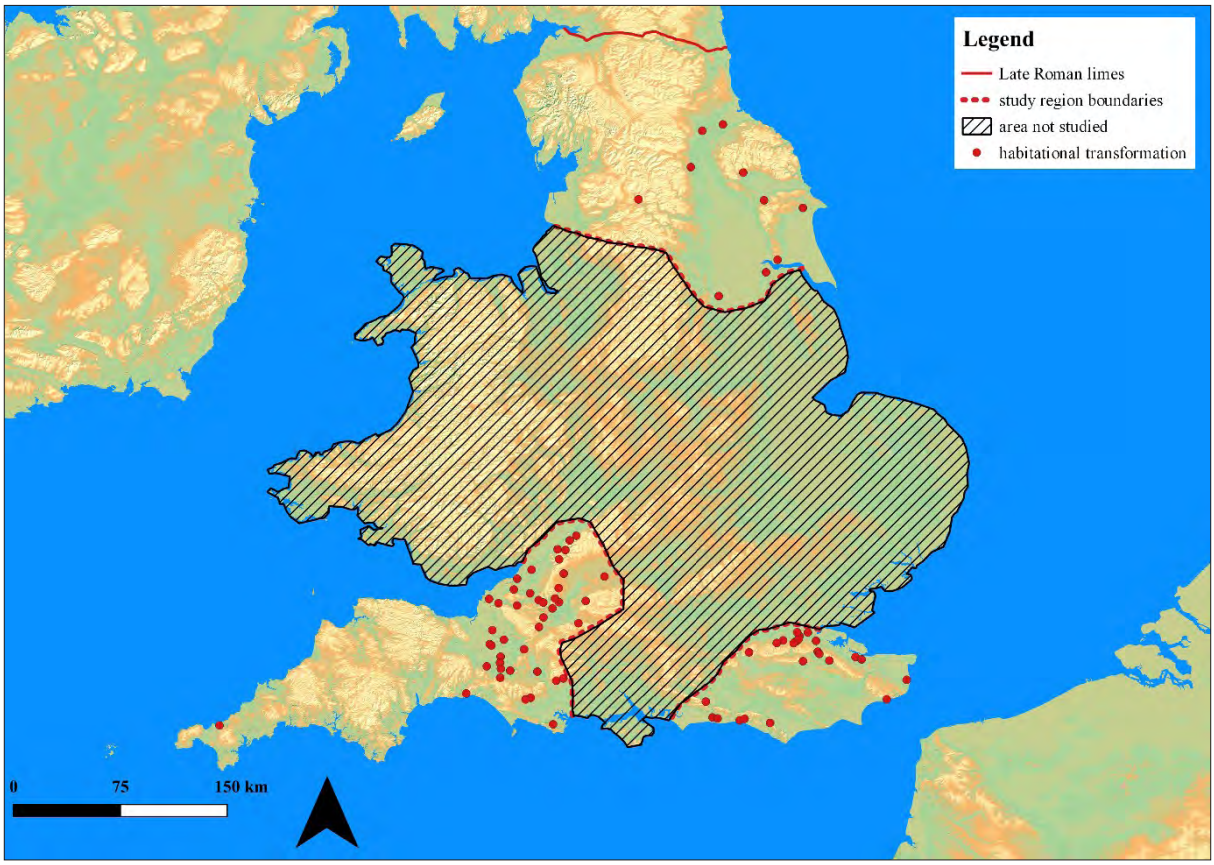

Fig. 3.14: The distribution of habitational transformation of villa sites in *Britannia* in the Late Roman Period (J. Dodd).

Habitational transformation dominates in *Britannia Prima*, with almost all surveyed sites demonstrating some form of domestic change (figure 3.14). Habitational change is spread across all land types in the region, with an especially dense cluster located on the Cotswold ridge. The few sites demonstrating no evidence of habitational change are generally located along the coasts of the Bristol Channel and may represent environmental change related to sea-level changes, for example at Birdcombe Farm, where flooding on the Somerset Levels appears to have ended occupation in the middle of the 4th century (Sykes and Brown 1961).

A second cluster of sites is located in *Maxima Caesariensis* and clusters along the corridor of Watling Street between London and Richborough. This group consists of a number of large sites occupied into the 5th century that demonstrate significant change in function and design and notably includes the majority of the earliest Saxon material found at villa sites in *Britannia*. The dense nature of this cluster suggests a social driver behind habitational change and indicates the centrality of this area in connections between *Britannia* and the near continent in the Late Roman period. In contrast to the ubiquitous nature of occupation in *Britannia Prima* and the clustered nature of habitational transformation in *Maxima Caesariensis*, habitational transformation in *Britannia Secunda* is relatively balanced. This reflects both the rarity of villa settlement in the region and the generally equal distribution of habitational change at sites across the area.

The nature of habitational transformation in *Britannia* is overwhelmingly small-scale. Despite the geographical differences between Northwest Gaul and *Britannia*, the pattern of transformation is very similar (figure 4.7). Habitational change at the majority of sites is limited to several forms: single buildings, alteration of small areas of a larger structure and a smaller group of new wooden structures. There are, however, a number of different patterns to those illustrated in figure 4.7. A middle tier of sites (demonstrating between 4 and 5 transforming rooms) is present in figure 3.15, relatively uniformly spread across

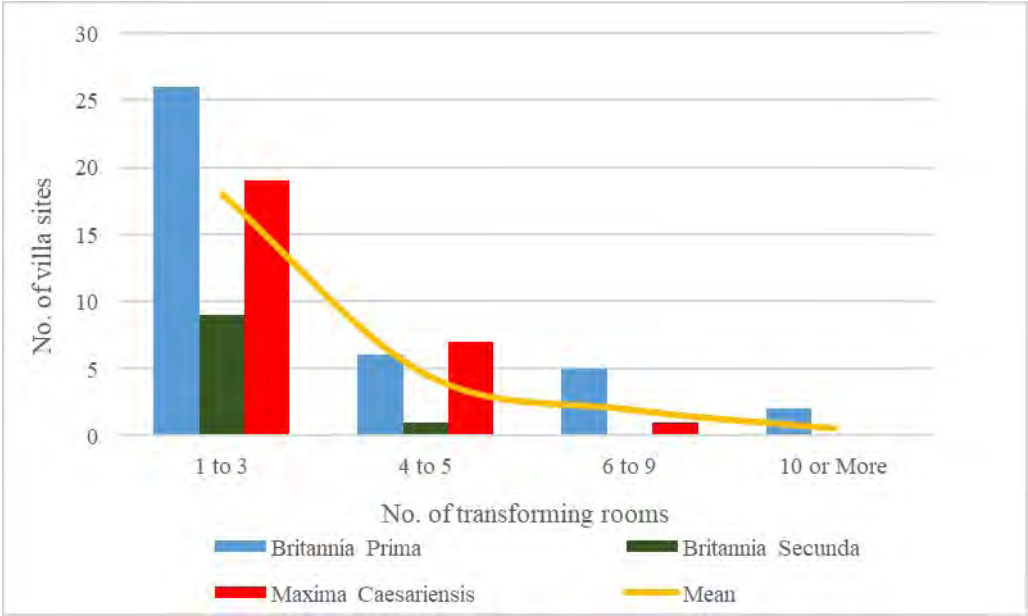

Fig. 3.15: Density of habitational transformation at individual villa sites by province measured by number of transforming rooms (*n*=76) (J. Dodd).

all three Late Roman provinces. This intermediate tier is superseded by a small group of large sites, all located in *Britannia Prima*.

These large sites, likely acting as significant drivers in the rural economy, consist of substantial sectors of occupied rooms with significant stylistic shifts. A key example of this is at Great Witcombe (Leach 1998) in *Britannia Prima*. Great Witcombe experienced widespread transformation from the 360s onwards, with large sectors of the site converted to both habitational and agricultural use. The original excavators described mosaics converted to 'camping floors' (Clifford 1954, 26-27), generally interpreted as domestic use zones, in both wings of the building. The large size of a number of sites such as Great Witcombe suggest that some sites, primarily larger villas underwent transformational trajectories that included large-scale nucleation of populations from the surrounding area and may have begun to play an economic and social role formerly utilised by other forms of rural sites, such as the roadside settlements and nucleated villages.

The configuration of habitational change in *Maxima Caesariensis* is somewhat different. The patterns of occupation closely mirror the situation in Northwest Gaul with the majority of sites being small-scale, supplemented by a small group of larger sites. This development is especially shared by the Belgic provinces and it demonstrates the detached nature of Southeast England from the rest of *Britannia*. The region, with its closer links to the continent, may have been experiencing different socio-economic conditions from the rest of the diocese at key junctures during the Late Roman period, although further work is needed to develop this hypothesis.

3.4.2c TEMPORAL PATTERNS

Temporally, widespread transformation is limited to the second half of the 4th century across the majority of the diocese. Both *Britannia Prima* and *Britannia Secunda* fit into a pattern of slow, steady increases in habitational change from the beginning of the 4th century, peaking in the last quarter of the 4th and early 5th centuries (*cf.* Dodd 2014; figure 3.16). The temporal breakdown supports long held beliefs about the breakdown of the villa landscape at the turn of the century, although this is somewhat offset by the

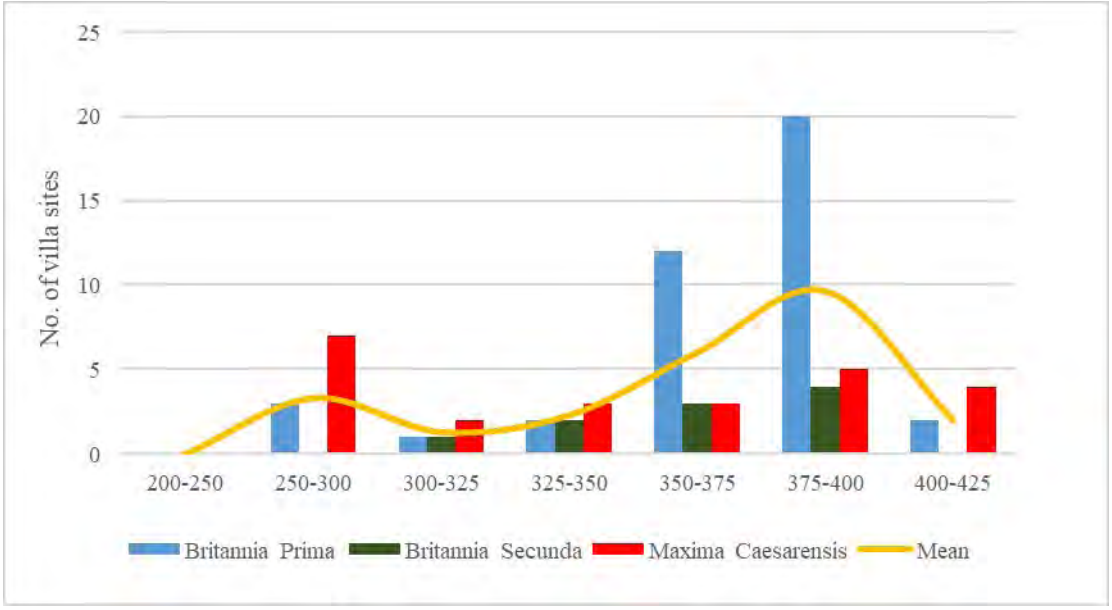

Fig. 3.16: First appearance dates for habitational transformation expressed as quantity of sites set against a regional average bar (*n*=74) (J. Dodd).

long-term nature of the phenomenon throughout the 4th century, which hints at structural imbalances within elite rural society, which anticipated the physical disrepair of villa sites in *Britannia*.

This general pattern of increasing habitational change does not fit with the situation in *Maxima Caesarensis*. It coincides with a phase of deliberate demolition and abandonment at a number of villa settlements and it is likely linked to socio-economic stress in the province. It forms part of a large reorganisation of rural occupation, with new settlement appearing in formerly unexploited areas and a retreat from the coast, likely due to sea level changes. Habitational change is also linked to a change in production patterns, for example the decline and eventual end of large-scale extraction of iron in the Weald.

The sharp decline in new instances of habitational change in the 5th century indicates that either the social need for transformation was no longer present or continued occupation in this style was not an effective socially or economically viable strategy by the beginning of the 5th century. The social drivers behind transformation are generally a 4th century phenomenon, with its slow increase between 300 and 400 indicating that the 'golden age' of the villa in Britain was not ubiquitous, with large numbers of sites not experiencing the economic boom.

3.4.2D DISCUSSION

Habitational change represents a key shift in the social priorities of villa elites in Late Antiquity. It is ubiquitous in all regions and all periods under study. The appearance of habitational change in *Britannia* is not simply a short-term reaction to crisis and change in the late 4th and 5th century but rather a long running structural element, equally distributed across different territories, to the composition of the rural landscape in the diocese from the 3rd century onwards.

The most apparent feature of habitational change in *Britannia* is its appearance in times of increased socio-economic stress. Significant peaks of activity occur in the second half of the 3rd century, primarily but not exclusively limited to *Maxima Caesariensis*, at which point there is evidence for large-scale reorganisation of rural landscapes. A second peak is present in the late 4th and early 5th centuries, at which

point there is significant evidence for a general degradation of structural aspects traditionally associated with villa occupation prior to the collapse of the Roman rural settlement pattern. This long-term aspect to transformation supports assertions made by Esmonde Cleary (1989, 134) that the analysis of transformative deposits must consider the long-term nature of these elements within the Roman rural economy. Despite its widespread nature between 375 and 425, transformed villa settlements essentially disappear from the landscape by the middle of the 5th century at the latest.

The implications of this are difficult to model. The short-lived presence of widespread habitational transformation suggests that it was not socially sustainable in the long run, being superseded by new settlement styles and occupation patterns, especially in the east where Saxon immigration was strongest in the 5th century. On the level of individual sites, the inability of estates and their presumed elite owners to convert disposable capital and surplus production into social status may have played a significant role in the process of habitational transformation. Villas entering a transformational trajectory represent settlements 'crashing out' of the race for power and status, with the capital requirements for construction or maintenance of high-status Romanised display no longer available to villa owners, especially if production capacity was the focus for investment in light of the expanded supply requirements on the province. This is especially likely to be the case for smaller villas, where assets and income were naturally lower than larger estates, which were able to marshal a greater degree of resources for social capital and balance social power and productive capacity. Larger, wealthier estates with a larger net income were able to drive continuity of settlement and production, if not the continuity of display-orientated lifestyles.

The presence of larger villa sites in the database especially in *Britannia Prima*, illustrated in figure 3.15 suggests that this settlement nucleation was supported by the transforming rural conditions. Powerful socio-economic drivers, for example the decline and abandonment of roadside settlements and nucleated villages created the conditions for transforming villas to fill the social niche occupied by these forms of sites over the course of the 4th century.

In essence, habitational transformation is not solely a 5th century phenomenon, nor a post-Roman activity, but rather forms an important and integral part of the social composition of elite complexes throughout the Late Roman period.

3.4.3 PRODUCTIVE TRANSFORMATION

Productive change is a widespread phenomenon in the transforming villa landscapes of *Britannia* in Late Antiquity. A selection of 50 sites spread throughout all regions of the diocese show evidence for productive transformation. These sites include a diverse range of activities, including everything from small-scale artisan metalworking, for example at Lower Woods, where late 4th century metalworking overlies a reception room mosaic[7], to large-scale agricultural use such as at Dinnington, where much of the site was converted to agricultural and metal processing over the course of the 4th century (King and Grande 2015).

3.4.3A DISTRIBUTION AND DENSITY

The distribution of productive transformation bears a resemblance to habitational patterns in *Britannia*, with a relatively weighted distribution throughout the three areas under study (figure 3.17). The majority of sites are located within a day's transportation reach of extractable resources; either cultivated farmland or in the case of metalworking, close to known Late Roman ore extraction sites. A key example of

[7] Unpublished source

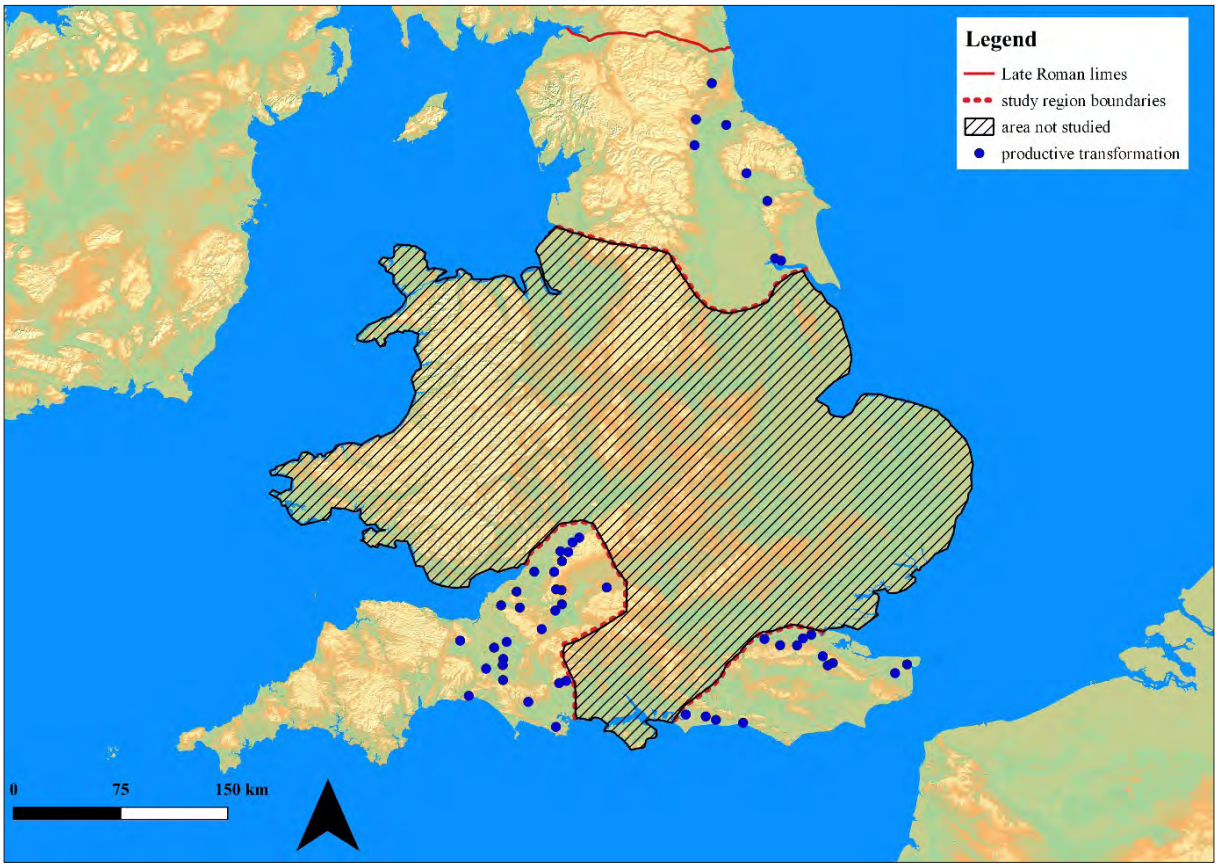

Fig. 3.17: Distribution of productive transformation at (former) villa sites in the British provinces (J. Dodd).

this is the correlation between the raw material processing facilities at Holcombe and the lead mines at Charterhouse.

Several clusters are present in the data. Firstly, a large group of sites spread along the Mendip and Cotswold hills stretching southwards into modern Somerset. Both ranges of hills were fertile with significant agricultural potential in the lowland landscapes of Somerset and Dorset. This group primarily represents the large-scale continuity of agricultural production in the region and includes the majority of the largest and most-long lived villas in the diocese, including Frocester (Price 2000a) and Dinnington (King and Grande 2015), although other forms of productive settlement are present in the record. This cluster disperses towards the south, although a number of important productively transforming villas were in use until at least the end of the 4th century on the southern periphery of this cluster.

A second cluster of sites stretches along Watling Street in *Maxima Caesariensis*. This group is primarily made up of agricultural and metal processing sites and clusters on both sides of the highway with notable nuclei in the Darenth and Medway Valleys. Most of these sites continue production into the second half of the 4th or early 5th centuries, likely influenced by the presence of traffic along Watling Street, benefiting from the resource flow between London, the diocesan capital, and the major ports of entry in Kent. This cluster is further supported by the economic presence of two late roadside settlements at Ospringe (Sibun 2001) and Springhead[8] and a late fortified town at Rochester all of which seem to have acted as resource and collection hubs to some degree in Late Antiquity. It is likely that economic production in the transformed villas along this corridor exploited this resource link. Notably, this group of sites shows

[8] https://archaeologydataservice.ac.uk/library/browse/issue.xhtml?recordId=1098522&recordType=GreyLitSeries

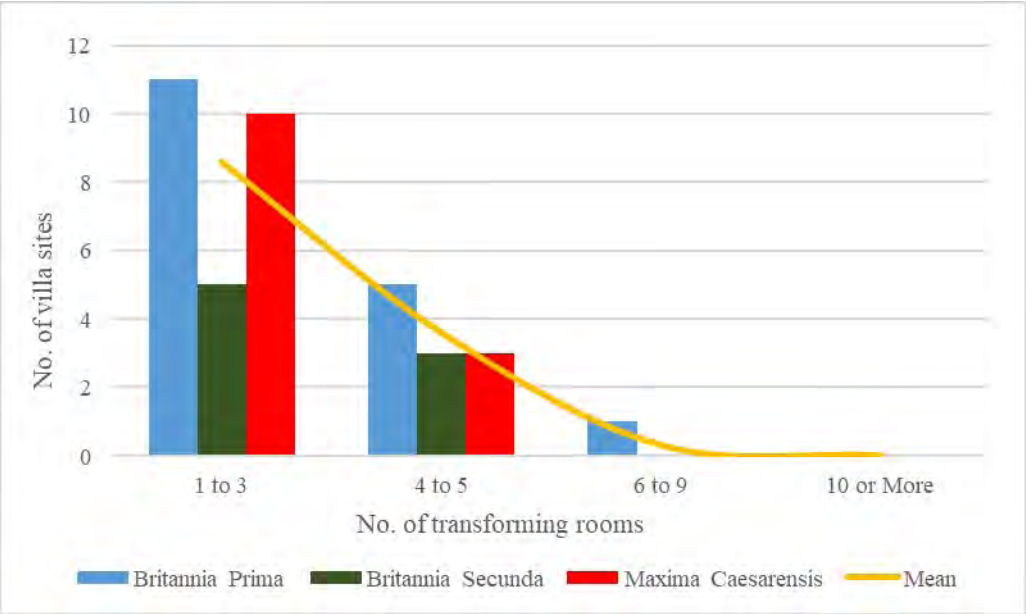

Fig. 3.18: Density of productive transformation at individual villa sites by province measured by number of transforming rooms (*n*=38) (J. Dodd).

little or no large-scale metalworking processing and production, despite the attested collapse of iron extraction and production in Weald (section 3.4.3b.i).

Productive transformation in *Britannia* is overwhelmingly small-scale in nature with the majority of industrial production undertaken on a localised scale by cottage producers. There is little or no evidence of larger, intermediary sites acting as resourcing processing and collection centres before dissemination into urban or military markets. Only a single site, Dinnington, presents evidence of large-scale organisation and production on more than a localised level (King and Grande 2015). This may be due to excavation bias. Productively transforming villas played little or no role in the movement and marshalling of craft resources in the rural landscapes, with agricultural processing being their primary function (figure 3.19). Other sites, primarily functioning small towns, nucleated settlements and surviving roadside settlements were acting as large-scale markets and marshalling zones for resources.

Despite the evidence that economic transactions and the movement of resources was undertaken at other forms of settlement, the cottage production nature of productive change suggests that there was a fundamental shift in economic patterns in the Late Roman period. The attested decline in output of finished goods at a range of rural sites in Late Antiquity essentially created a supply bottleneck for metal goods and essential tools and products. This bottleneck is visible through the upswing in light industry at villa settlements, filling a supply gap *in lieu* of production elsewhere. The lack of large rural sites indicates a more fragmented economic picture. This economic pattern is further explored in 3.4.3c and is borne out through evidence from more easily understood industries such as pottery.

Agricultural production, typified by the presence of grain driers at villa sites, dominates the simple breakdown of industrial activity in the data set, although a diverse range of light industrial activity and artisan production does exist (figure 3.19). Primarily, this minority is made up of metal processing, especially in areas close to known Late Roman ore extraction sites. This change, further explored in 3.4.3b.i is key to charting the shift of resource processing from large-scale, usually state concerns to smaller 'private' operators; in most areas, for example *Britannia Secunda*, metalworking on anything but a local level is exceedingly rare.

A key group of sites displays evidence of multiple forms of productive change. This differs from the other northwestern provinces in that exotic combinations of craft production, for example metalworking

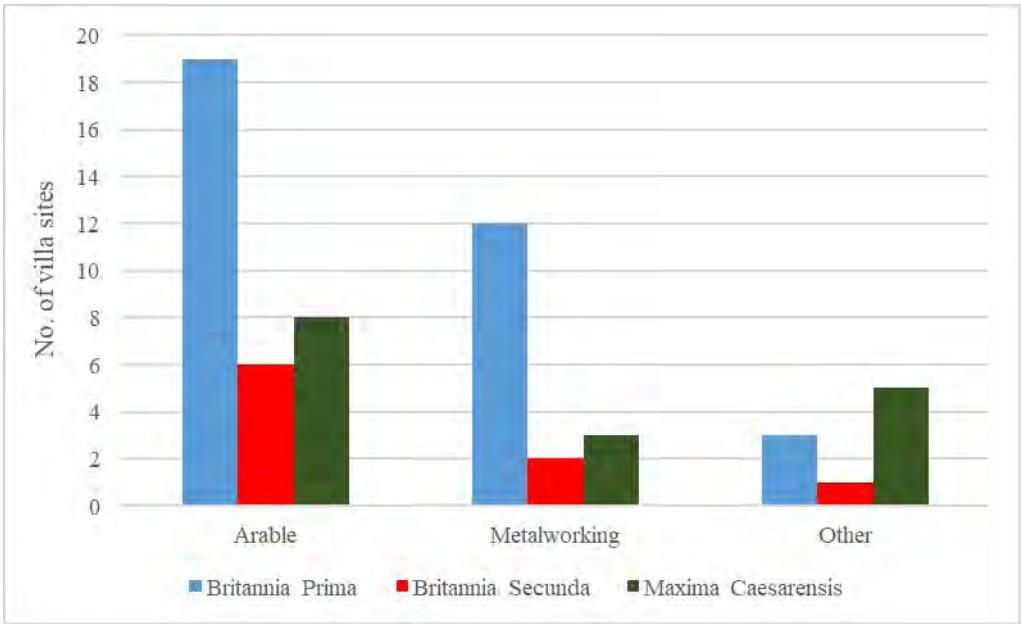

Fig. 3.19: A specification of productive activities at Late Antique villa sites by province and class of activity where data is available (*n*=59) (J. Dodd).

and bone working at Borg, an axially orientated villa in *Germania Prima* (Birkenhagen 2011), were not present in *Britannia*. Instead, multiple production trajectories tend to be combinations of simple metalworking, for example smithing, repairing, and reworking combined with agricultural processing and storage. This is illustrated by the large site at Dinnington (King and Grande 2015) where a degree of intense agricultural production appears to have continued in tandem with moderate-scale metalworking and blacksmithing, specifically for the repair of tools and implements.

This simple correlation between agricultural and metalworking transformation is highlighted further by the lack of 'exotic' manufacturing, for example bone working or glass manufacturing. It suggests that there was no significant consumption of luxury goods at transforming villas, although imported glass is present at some sites at the very end of the 4th century, for example at Ingleby Barwick (Willis and Carne 2011). It indicates that specialist manufacturing took place elsewhere, either in other rural sites in *Britannia*, perhaps at ladder settlements or nucleated villages, the majority of which are poorly explored, or that goods were regularly imported from continental sources.

3.4.3B THE RURAL ECONOMY

This section analyses the economic trajectory of the British diocese. This includes both the role played by rural crafts and industries such as metalworking and tanning as well as the agricultural economy. It will also provide a regional economic model for villa-based rural production in *Britannia* in the Late Roman period.

3.4.3b.i The arable economy

a) The economic background

Economically, our understanding of rural production and capacity in Late Roman *Britannia* is approaching a critical mass of data (*cf.* Allen *et al.* 2017). This is reflected in the conclusions made by the *New Visions*

of the Roman Countryside on Roman society and economy in the rural sphere. The situation of Early and Middle Roman agriculture in *Britannia* was largely unchanged from Late Iron Age cultivation patterns, with no significant shift in agricultural intensity, as experienced in Gaul and the Germanic provinces (*cf.* Habermehl 2014). Instead, extensive changes and a slow increase in capacity, driven by a variety of factors including technological innovation began to appear from the middle of the 2nd century onwards. This reorganisation is likely in line with the slow integration of various regions into the monetary economy and the growth of market exchange as a mechanism for resource transactions (Brindle 2017, 240-246).

From the middle of the 2nd century onwards, the data set illustrates that there was a slow increase in economic output by the rural economy, reaching a peak of intensity by the middle of the 4th century. In opposition to the situation in Northwest Gaul and to a lesser extent *Narbonensis*, rural production in *Britannia* as a whole generally suffered little or no effect from economic reorganisation in the second half of the 3rd century (Fulford 2017, 360-362). The wealth and productive capacity of villas in the British provinces, unlike most of northwestern Gaul reached their zenith in the early 4th century, with large new foundations, extensions and an upswing in capacity and production of agricultural resources. The increasing surplus production at rural settlements is reflected in the increasing size of urban conglomerations, although there is some evidence that grain needed to be imported to support them (Straker 1984), suggesting that the diocese was never completely self-sufficient (Van der Veen 2016; Allen *et al.* 2017, 83). Certainly, in terms of some cereals, *Britannia* may have been producing a large surplus with evidence for large-scale deliveries of grain to the continent[9], where British grain seems to have played an important role in military supply networks.

b) An approach to Late Roman supply and demand

Economically, Middle Roman patterns of rural exploitation, structured around the market exchange of resources and typified by the use of a developed monetary system survived in *Britannia* into the late 4th century, especially in the villa landscapes of the south (Walton 2011; Allen *et al.* 2017, 278, fig. 6.42). Resources shifted from rural producers, primarily the villas, to semi-urban markets and then into the hands of the army supply network. In the late 4th century, there is evidence of significant productive change at villas. Capacity generally increases as high-status elements are converted into processing installations, with little or no evidence for widespread production decreases at most villa centres until the last quarter of the 4th century. An increase in output suggests that the market-based interactions of the previous century were maintained, something supported by the evidence from larger semi-urban centres. Nucleated rural centres and roadside settlements continue to be occupied until the end of the 4th century, in a manner similar to *Germania Prima*. However, their productive functions decline, leading to the upswing in light industry at villas from the mid- 4th century onwards although their market functions appear to continue (Smith 1987, 100-106), for example at Catsgore (Leech and Arthur 1982).

The overwhelming argument for the increase in agricultural capacity is *Britannia*'s central role in military provisioning in the Late Roman period. Military supply in the northwestern provinces was driven by British grain shipments; both within the diocese and exported to the garrisons on the Rhine (*cf.* Heeren 2018; Zosimus 3.5.2; Amm. Marc. 18.2.3). The written sources are somewhat fragmentary in support this this hypothesis. Both cited examples refer to a series of incidents under the reign of one emperor, Julian II, who supposedly refurbished urban centres in Northeast Gaul and who explicitly pacified the Lower Rhine in 358 to allow for the passage of a grain fleet from *Britannia* (Amm. Marc. 18.2.3). Other evidence, notably in the coinage supply and use at British sea-ports (Wigg-Wolf 2016, 225-226) and the fortification of riverine corridors in *Germania Secunda* (Heeren 2018) is also indicative of long-term

[9] Zosimus 3.5.2; Amm. Marc. 18.2.3; *cf.* Heeren 2018 for a modern view on this connection based on a comparison between *Britannia* and the Germanic provinces. See below for a full development of this economic link.

supply arrangements with the Lower Rhine zone. Although the evidence is not explicit, it is likely that British grain shipments played a key part in the economic integration between the Lower Rhine and *Britannia* and this study will take this as a starting point for an assessment of supply and demand within the Late Roman economy of *Britannia*.

Britannia's role in the new supply pattern is related to the large-scale realignment and reorganisation of military dispositions as well as the changing nature of rural production. The 3rd century decline of villa complexes in *Belgica* and the Germanic provinces negatively affected supra-regional supply patterns. In the northwestern provinces, this effectively meant that bulk agricultural goods were no longer being supplied from the Belgic hinterland but rather new sources of supply had to be developed, with *Britannia* being the immediate option. The process of supply reorganisation is illustrated by a case study of villa settlement in *Britannia Secunda*, using the evidence set out in the appendix. The northern province of the diocese saw capacity increases throughout the 4th century, stimulated by consumer demand from the military that encouraged a change in the supply-demand balance with an increased local demand for a whole range of bulk agricultural goods. Economically, supply reacted to meet the new increased level of demand. The army's increased requirements provided the stimulus for regional improvements in agriculture as suppliers increased capacity and production to meet new quotas. The rewards for this, either in the form of monetary payment or tax remissions allowed villa owners to pour surplus capital into non-functional and prestige elements such as bath houses, larger buildings, and more luxurious décor. There is also evidence that some of these villas may have had state support or benefitted from military specialists for construction; for example, a large number of tiles at a selection of villa sites appear to be stamped with military markings. When considering the role of the villas of *Britannia Secunda* it is worth addressing the expectations of the military community. Supply arrangements would likely have been primarily in the form of bulk agricultural goods, in short, the produce of the mixed economic output of British rural settlements. This produce would have been in the same form of tax-in-kind, and it may have been easier for local officials to collect and transport to supply dumps and nexuses such as the headquarters of the *Dux Britanniarum* in York. Primarily this means grain, meat, dairy products and their associated by-products. These by-products, such as hides may have been the raw material to fuel small-scale localised military production. The localisation apparent in this model is archaeologically attested in the development trajectories of other industries in the wider frontier zone. The supply of ceramics is a key example of this. From the second half of the 3rd century onwards imported pottery becomes an uncommon luxury good whilst even ceramics from Southern Britain, such as the products of the black-burnished tradition had almost ceased by the middle of the 4th century (Evans 2000, 39; Gerrard 2008, 117). Instead, a local pottery industry developed at Cranbeck to fill this gap (Evans 1990; Evans 2000, 40-41; Swan 2002, 73). This localisation continued into the late 4th and early 5th centuries with Cranbeck and Huntcliffe wares (Tomber and Dore 1998, 201) becoming the dominant ceramic on both civil and military sites by the end of the 4th century (Bidewell and Croom 2010, 35-36).

Conversely, it can be argued that the decline of the garrison size over the course of Late Antiquity is the key element behind the increasing diversity of many industries in *Britannia Secunda*. The 2nd century army was simply too large to be supported by production in Northern England, instead of being supplied by an extensive empire-wide military supply network. The breakdown of long-distance trade in the 3rd century made it an imperative for the supply agents to develop a local network quickly. This is archaeologically visible in *Britannia Secunda* by the growth of villa landscapes and the intensification of agricultural cultivation, which enabled a greater proportion of the garrison to be supplied through local sources rather than a long-distance supply organisation. Military encouragement likely stimulated the increase in economic production and when coupled with attested garrison withdrawals throughout Late Antiquity and the end of the majority of extra-mural *vici* in the Wall Corridor, it allowed the increasingly productive villas to serve a larger proportion of the military community on the wall. The villas of the north and northeast were well placed for a greater supply role and when coupled with the smaller needs of the garrison, these villas could conversely supply a larger percentage of demand. The

situation becomes less clear at the hinterland forts. Extra-mural settlement survived and in a number of cases thrived, for example at Catterick and Piercebridge, despite a widespread phase of abandonment at many similar sites not tied to military installations across Northern England. The supply of this smaller military force required the increases in agricultural capacity noted at many villa sites. This capacity was within reach without excessive investment or overambitious capital outlays.

This approach is somewhat unconventional and assumes that, all other things being equal, *Britannia* was acting as a closed economic system in which production was geared towards military consumers on Hadrian's Wall. However, if this is expanded to include Northwest Gaul, the system takes on a new facet, with British grain supplying both the Wall garrison and the army on the Lower Rhine. Troop reduction on the Rhine *limes* allowed less dense exploitation to supply a larger proportion of military demand. Production in *Britannia* increased, either through natural economic processes or more likely, through the encouragement of the state in some way to meet the supply gap left by the collapse of agricultural production in the second half of the 3rd century in Northwestern Gaul.

3.4.3b.ii Rural craft and industry

Metal processing

province	ferrous	non-ferrous	both ferrous and non-ferrous
Britannia Prima	8	0	1
Britannia Secunda	1	1	0
Maxima Caesariensis	2	0	0

Table 3.2: Breakdown of villa sites by type of metalworking present where known (J. Dodd).

Metal processing in *Britannia* is overwhelmingly small-scale in nature. Metalworking sites are spread across all three areas, with a skewed distribution towards *Britannia Prima*, reflecting the larger breakdown of sites in that region. Primarily, metal processing concerns the smelting, working, and smithing of iron ores and ferrous metals, however there are some exceptions (table 3.2). Bronze processing is present at Bainesse (Wilson 2002) in *Britannia Secunda* whilst there is evidence of a significant sophistication of lead or *galena* smelting at Holcombe (Pollard 1974) in *Britannia Prima*. Both these anomalies lie outside the main trajectory of metalworking in rural contexts; bronze forging at Bainesse dates to an earlier period, sometime in the 3rd century, whilst it is likely that lead smelting at Holcombe was undertaken as a by-product of iron processing at the site.

Several spatial trends within this data set are apparent (figure 3.21). The appearance of several sites in *Maxima Caesariensis* is indicative of a re-alignment of iron production in Kent and Sussex in the 4th century. The Weald suffered a major decline in output in the Later Roman period (Cleere and Crossley 1985, 85), possibly related to the reorganised priorities of the *Classis Britannica*, which has been assumed to have played a role in centralising and supervising iron production in Kent (Adler 2013, 17, fig. 5.3). The collapse of this industry left a vacuum for local producers and consumers, who will have benefitted from a degree of military surplus production, despite the likely military destination for much of the output from the Weald. With the supply of iron ingots from the Weald industries drying up over the course of the 3rd and 4th centuries, local producers were forced to address the supply bottleneck, primarily through subsistence level metalworking for their own means. It is noticeable that both sites located in *Maxima Caesariensis* appeared to have the capacity both to smelt raw ore and had roasting ovens for further refining (Philip *et al.* 1991; Robertson 2008).

A second group of sites in Somerset and Gloucestershire is also worth noting. The shift from large-scale producers in Western *Britannia*, such as the Forest of Dean and Charterhouse mines, towards small-

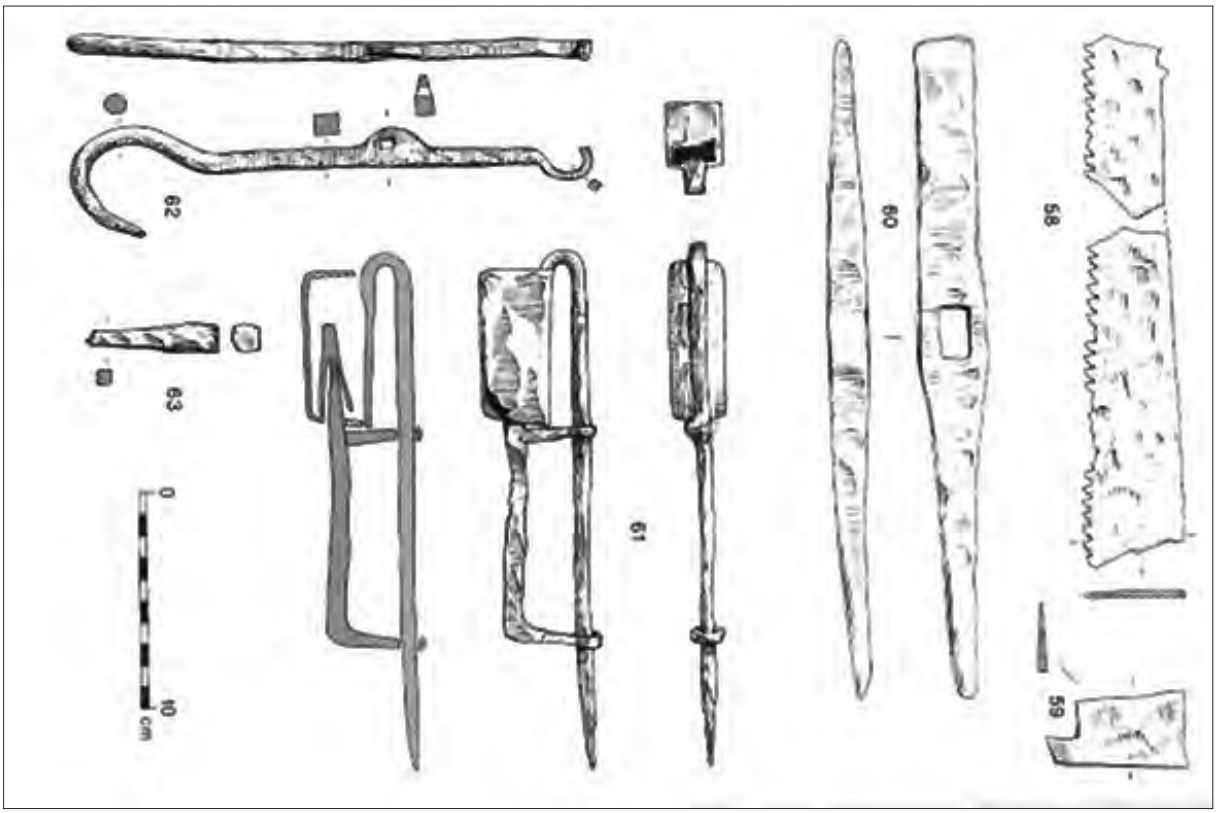

Fig. 3.20: Agricultural implements in a late 4th or 5th century hoard at Beadlam (after Neal 1996, 56, Fig. 38).

scale manufacturers at rural sites is well attested in the area (Allen *et al*. 2017, 182, Fig. 5.3). This reflects the widespread reorganisation of local and regional markets in the Late Roman period. Although little or no quantification of the raw materials for many of these sites has been undertaken, this would likely yield interesting results concerning the movement of resources.

All stages of metalworking are represented in the British element of this data set, including initial ore smelting. This final group of sites, typified by the smelting centre at Holcombe in *Britannia Prima*, where the bathhouse seems to have been converted into a blast furnace and a smelter appears to be processing raw ores on a near-industrial scale. Overall, this is typical of the shift from large iron processing sites to a multitude of smaller manufacturers, partly due to the contraction of markets and the development of local demand centres in the Late Roman period. The changing pattern spurred villa owners to diversify their own craft production to suffice their needs, although the scale and supply chains behind the acquisition of raw materials in Late Antiquity are very poorly understood.

In general, rural metalworking differs greatly from the continental northwestern provinces. Primarily this related to the widespread association of agricultural processing and low-level metalworking such as smithing and reworking. A proportion of 47% of metalworking sites are combined with agricultural change, compared to only 10% in *Germania* and *Belgica*. This correlation makes it difficult not to associate small metalworking elements at agricultural sites with simple blacksmithing and repair workshops. This is demonstrated by the layout of Building 1 at Beadlam, where agricultural elements dating to the second half of the 4th century appear to be spatially separated from a number of blacksmithing workshops, complete with two hoards of iron implements (Neal 1996, 22-23, Fig. 18a, Fig. 18b; figure 3.20).

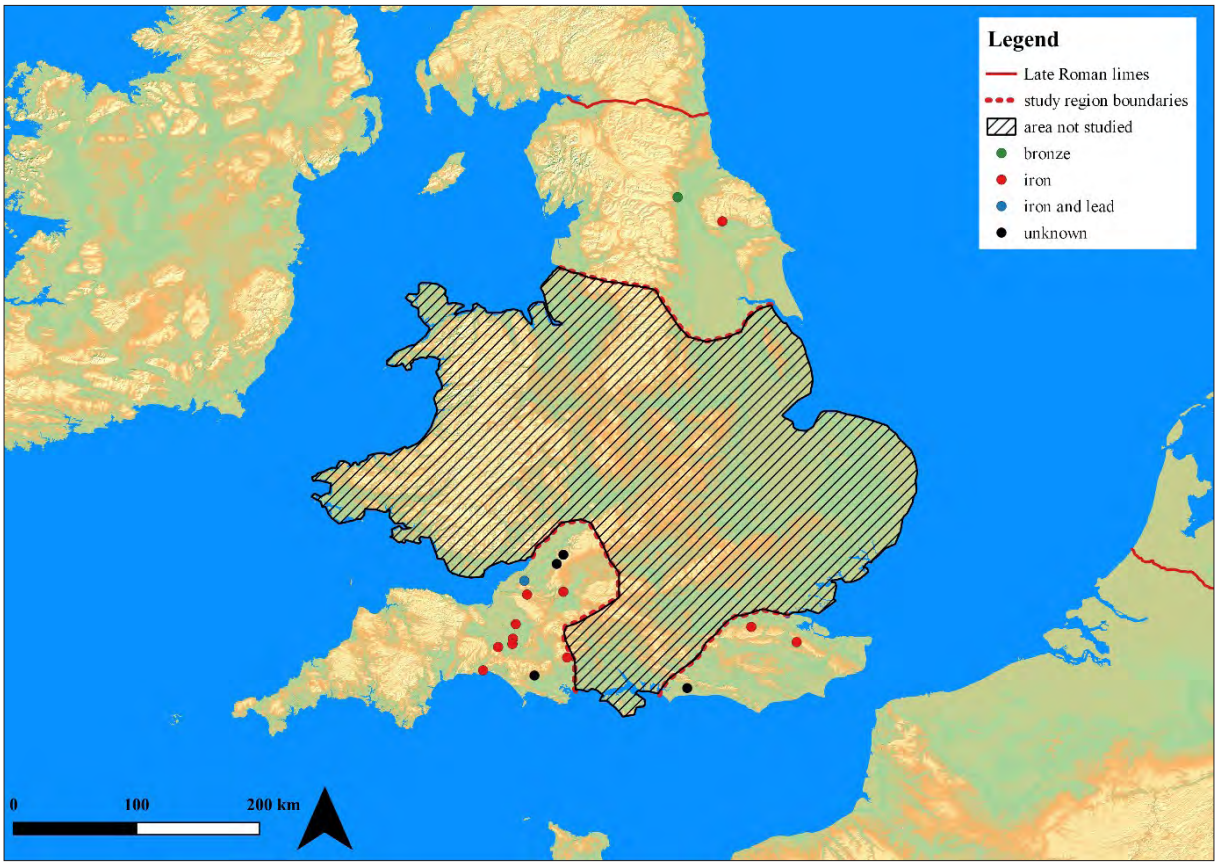

Fig. 3.21: Breakdown of metalworking transformation by processed metal type at villa sites type in *Britannia* (J. Dodd).

b) Other rural craft and industry

A range of other industries processes are present within the record of productive transformation. This eclectic mix of light industry generally consists of individual sites or a few villas operating within the same framework and it is spread across all three of the study regions. In the most part, these sites are difficult to quantify and understand, although their temporal and spatial locations fit into larger patterns of Late Antique and Anglo-Saxon landscape exploitation. Little can be said about the overall place of these transformative processes in the rural economy.

Salt production appears at a single 3rd century site in *Maxima Caesariensis* (Scott 1938; 1939; Keef 1945; Wilson 1947). Salt was an important component to the Roman economy with several important uses (*cf.* Stockinger 2015). Given the position of the site on the coast, Angmering likely exploited coastal seawater for salt production. The nature of the facility, a converted villa bathhouse suggests that there was no formal control over the processes by higher authorities in the 3rd century in Sussex and the exploitation of coastal saltpans may have begun in response to rising sea levels associated with the Dunkirk II transgression. Unfortunately, the site is badly published, having been excavated partly during the Second World War and little can be said about the process of production or whether any briquetage material was recovered from the excavations.

The single example of salt processing is complemented in the southeast by a single example of a site transformed to leather production. Lullingstone (Meates 1979, 105-108) underwent an early first phase of transformation in the late 2nd or early 3rd century in which the large kitchen was demolished and converted into an industrial-scale tannery. This shift saw a large soaking pit, liming and deliming tanks and work areas set out at the rear of the villa, although different interpretations for this do exist (*cf.* Van Driel-Murray 1995, 5). The process was centralised and large-scale, suggesting that this was not the prod-

uct of a local or regional market, likely in some part being utilised by the military demand for finished leather goods. The nature of the evidence, with the kitchen totally converted to production suggests that the population of the villa declined during this period or that the elite owners of the villa resided elsewhere in this period or it was only utilised for a part of the year, when the owner spend time in his urban *domus*. Despite the industrial nature of this production, the 1.37m deep soaking pit produced evidence of exotic seeds and stones. The recovery of sloe berries and plums suggests that this isolated example of leather production had a separate dimension to it, perhaps producing higher quality goods for military customers.

Bone and antler working are key elements to the rural landscape throughout the Late Roman period with 12% of villas in *Britannia* demonstrating evidence of it (Allen et al. 2017, 216-218, Fig. 5.24). Its presence at villa sites has been tied to Late Roman ideas of elite hunting and the need for processing deer carcasses, something tied to a surfeit of raw material by Allen (2014). Only one site, Yarford, displays evidence of antler working; contextually situated on a tessellated pavement blackened by the manufacturing process (Webster *et al.* 2003). It is possible that this change marks a shift from agricultural exploitation to pastoral management, although unfortunately too little is understood of the surrounding landscape to make such assumptions on the role played by bone working in transforming contexts in *Britannia*.

The final two forms of transformation can broadly be referred to as construction-related industries. Two sites demonstrate evidence of lime manufacturing, at Brantingham (Liversage, Stead and Rigby 1973) and Northfleet (Steadman 1913), although the context for both may date to the Medieval period and it is unclear whether the kilns were utilising the rubble of the villas themselves for raw material. Lime was a key element for both constructions, especially for wall plaster and agriculture. The context of transformation would suggest that the lime-kilns in use were not geared towards the manufacture of plaster but instead towards lime for agricultural slaking or tanning. The date of both these kilns is unknown and they may be temporally located outside the scope of this study.

The final industrial site is Fishbourne Palace. After the fire destroyed the site in the late 3rd century (Cunliffe 1971a), a series of hearths, tools and demolition deposits dating to the early 4th century were recovered in the east wing. This occupation phase appears to have been related to the stone robbing apparent across the site as part of a sporadic reuse phase, with stone and ceramic building material lifted from the rubble likely alongside perishable material. This ties into long-term trends of reuse and sporadic abandonment in the rural fabric and when combined with other abandonment and demolition phases in *Maxima Caesariensis* in the 3rd century, the hand of an organised power can be detected. Demolition phases at Minister-in-Thanet (Parfitt 2006) and Folkstone (Wigbolt 1933) may be related to this. Both sites have been explicitly tied to stone recovery for construction of the Saxon Shore fortifications. Operations at Fishbourne may also have fitted into this framework as an easy source of *spolia* material only a short distance away from construction works at the 3rd century fort of Portchester Castle.

3.4.3c Discussion – Britain as the grain-basket of northwest Europe?

Britannia has long been viewed as a net producer of agricultural commodities in the Late Roman period. Traditionally, this took the form of a model that the villa landscapes of the diocese supported the military presence, with agricultural surplus flowing north and west towards Hadrian's Wall (Rivet 1969, fig. 5.5, 194; Allen *et al.* 2017, 84). Modern perspectives on production have generally supported this assertion but developed models suggesting that, in the Late Roman period, surplus was not only directed towards military consumption in the Wall Corridor but also on the Lower Rhine. The decline of villa complexes and by implication, productive capacity, in *Belgica* and the Germanic provinces (chapter 4; Heeren 2018) left a gap in the supply network that could be filled with an increased capacity in *Britannia*. Both the

historical evidence (Amm. Marc. 18.2.3) and archaeological evidence, in the form of Rhineland minted coinage in British ports (Wigg-Wolf 2016, 225-226) is suggestive of a more integrated supply system between Britannia and the Lower Rhine. It is likely that *Britannia* was a net exporter of at least some forms of cereals during Late Antiquity (see Allen *et al*. 2017, 83 for an overview of the archaeobotanical evidence) with British grain supplying a significant percentage of the Rhine garrison and perhaps also military installations and urban centres in the Meuse corridor. The importance of *Britannia* and the integration of the diocese into a larger tax-pay system had an effect on the production of agricultural resources well into the second half of the 4th century AD.

The role of transforming villas in this period is complex and poorly understood. Agricultural production at the sites appears to be increasing throughout the second half of the 4th century, although there is significant regional variation in this. The villas of *Britannia Secunda* had a clear role in the supply of the garrisons on Hadrian's Wall and were set within the staging zones of the frontier (Collins 2017, 203-207). Repeated evidence of increasing productive capacity at these sites suggests a stimulation of agricultural production in the region, marshalled by the Roman state, partly as a wider localisation of military supply. Agricultural transformation at these villas, as far as is possible to tell, seems to fall not into a longer trend of gradual centralisation of productive facilities but rather forms part of a 3rd and 4th century expansion of productive capacity. This contrasts with shrinking and centralisation of facilities apparent in villa contexts in both *Britannia Prima* and *Maxima Caesariensis* from the middle of the 4th century onwards, although the widespread continuity of agricultural production at villa sites in all regions of *Britannia* indicates that its primacy as a producer continued well into the second half of the 4th century.

Despite the ubiquity of agricultural change, its presence is not matched by an increase in other forms of light industry, as it is to some degree in the Germanic provinces and *Belgica*. Few sites act as large-scale smelting and processing centres, with only Holcombe Farm acting on a level similar to comparative sites in Northwest Gaul. Metalworking generally serves to support agricultural production. A majority of metalworking sites are small-scale and set within craft production zones at agriculturally orientated sites. This link, typified by sites such as Dinnington shows that metalworking sites generally dealt with small-scale maintenance, repair and moderate reworking of iron agricultural implements and tools such as the two equipment hoards from Beadlam. The shift of metalworking from other sites into the villa complexes hints at a large-scale reorganisation of rural craft and industry. It provides evidence that productive and maintenance functions at other forms of rural settlement were no longer acting within expected industrial patterns. From the early 4th century onwards, roadside settlements began to lose many of the economically productive functions; light industrial zones are abandoned, and dark earth deposits build up, with activity in other aspects of the site continuing. This suggests that the onus of local production and repair shifted from roadside settlements towards a more self-sufficient model at sites where villas acted as small-scale producers and maintenance workshops on a very local, perhaps only at an estate-wide level with specialist or semi-specialist labour housed at villa sites.

Despite the widespread localisation and regionalisation of elements of productive transformation, *Britannia* remains an important producer well into the second half of the 4th century. In terms of agricultural production, it acted as the dynamo for the regional economy of the northwestern provinces, increasing supply to close the slack gap left by the decline of intensive agricultural exploitation in *Germania Secunda* and parts of *Belgica*. British cereal production played a key role in army supply, with agricultural change at villas acting within this framework, especially in *Britannia Secunda*. The exchange mechanisms for this in the later 4th century are poorly understood. Some sites do experience new capital wealth investment, although the archaeological invisibility of the majority of benefits makes it difficult to suggest that the rural economy of *Britannia* was experiencing quite as large an economic boom as has been suggested, a topic further explored in chapter 6.

3.4.4 FUNERARY TRANSFORMATION

Within a British context, funerary reuse of villa sites is proportionally much higher than in other surveyed regions on continental Europe: 29 sites spread across all three studied provinces. British sites as a whole tend to have smaller, non-developed cemeteries or individual burials rather than large-scale ones. This marks a departure with the general trend in both Northern Gaul and the Mediterranean. The trend in other regions, highlighted in Chapters 4 and 5 is towards large, mature cemeteries. A majority of British villas, 78% of sites, consist of smaller cemeteries, with only 6 of these demonstrating evidence of more large-scale funerary use. What is problematic with this is the general lack of rural cemeteries in the Late Roman period. Very few villa sites in the Late Roman period demonstrate evidence of rural cemeteries (Pearce 2008; Smith 2018, 247-253) leaving us with a poor understanding of where and who the elite rural population were in *Britannia* despite the evidence for a boom of villas in the 4th century. The majority of the larger cemetery sites date to the Saxon period and over half of them are located in *Maxima Caesariensis*, the region with practices culturally and socially most similar to Northern Gaul.

3.4.4A TEMPORAL AND SPATIAL PATTERNS

The vast majority of funerary reuse of villa complexes in *Britannia* is small-scale in nature. Transformation falls broadly into three categories: individual burials, scattered groups and large cemeteries.

Temporally, the majority of these burials date between the late 3rd century and the immediate Sub-Roman period, although there are some outliers in the Saxon Period, at which point larger cemeteries begin to develop (*cf.* Halsall 1995; Gerrard 2015, 566-567). Although some temporal structure applies to the data, the stratigraphy for the majority of these burials is extremely poor and the lack of grave goods and chronological indicators hampers conclusions.

4th century burials are predominant in the data set with a significant spike of activity in this period, especially in *Britannia Prima* (figure 3.22). A detectable phase of earlier 3rd century reuse is visible in *Maxima Caesariensis*, although the connection between the early and late 4th century activity is difficult to link, partly due to geographical location. The important 4th century phase continues into the 5th century, although there are significant problems with dating the end of this development. The data is poorly preserved, so in many cases anecdotal evidence of a burial is used in lieu of hard data, for example in the case of the known burials uncovered at Well (Gilyard-Beer 1951). The vast majority of these burials are without significant apparel. Grave goods are rare with only one instance (Kirk and Corder 1932) noted in this data selection. Secondary to this, many of these burials are poorly situated, without a significant grave superstructure giving the impression that individuals have been 'dumped' in the ruins. The casual nature of burials, especially in regard to a lack of grave goods makes it difficult to stratigraphically date phases from the late 4th century and is further hampered by the poor publication and understanding of these burials.

A final group of sites within figure 3.22 is temporally located after the formal end of Roman Britain. This group of sites generally concerns large Migration Period cemeteries. Although large Saxon cemeteries are present at villa sites in the British sub-set, it is not on a par with the large-scale reuse of Roman villa terrains in *Germania Secunda* and *Belgica* and generally is located in the eastern side of the island with the majority situated in *Maxima Caesariensis*.

A number of sites have several phases of funerary reuse, demonstrating the longevity of the phenomenon and showing that is not solely something related to the 4th century. The complexities of this process are well-illustrated by the case study of Eccles, a large villa in *Maxima Caesariensis* excavated between 1962 and 1976 that displays a series of multiple trajectories of altered function in different parts of the site. The first phase of funerary transformation relates to decommissioning of the bathhouse during the

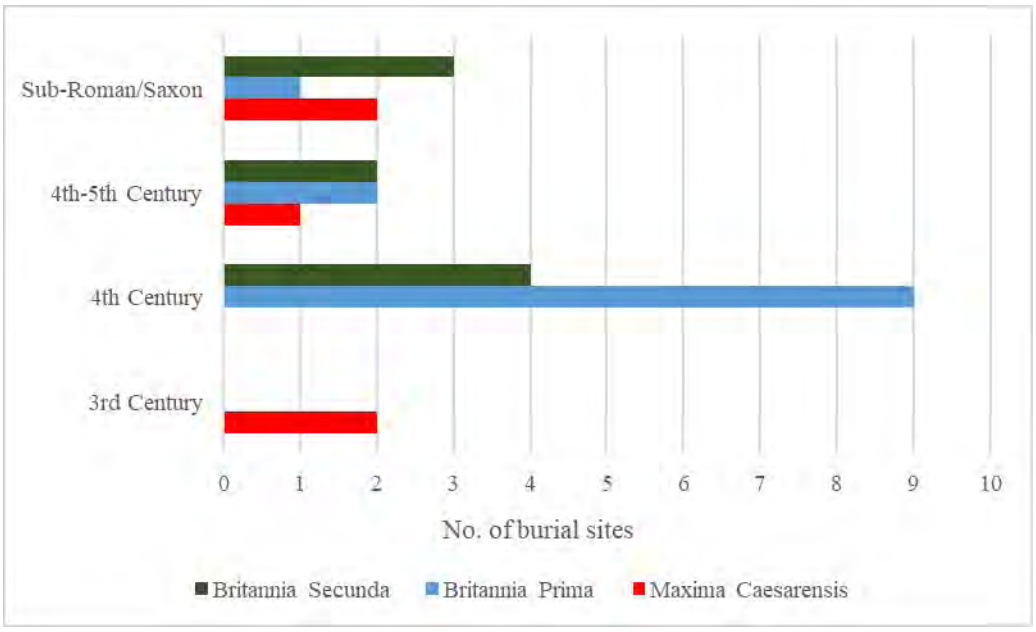

Fig. 3.22: Temporal breakdown of the number of villas or former villas demonstrating funerary transformation by Late Roman Province (*n*=26) (J. Dodd).

3rd century in a zone that acts as a small-scale burial ground during the late 3rd and early 4th centuries in conjunction with continued occupation elsewhere on-site. The second phase of transformation takes place after the end of formal occupation and takes the form of a Saxon cemetery in the southeast wing of the villa (Shaw 1994) concurrent with stone recovery operations. The chronology of Eccles demonstrates the shift towards co-habiting with the dead, beginning in the Middle Roman period, as well as the development of large-scale cemeteries in the Migration Period. It also shows that British sites are not unique in several respects, with large-scale reuse of sites for migration-period burials common in *Hispania*, Northern Gaul and the Germanic provinces and a commonplace relationship between immigrants and the rural structures of the region.

The singular nature of much of the British evidence is not paralleled elsewhere (figure 3.23). The high percentage of villas with individual burials essentially marks *Britannia* out from the continental provinces. It demonstrates the regional ubiquity of small-scale burial at villa sites across all three surveyed provinces with a progressive decline in recorded density correlated to the size of the cemetery in question. Middle-size cemeteries are relatively uncommon, with large sites such as Eccles and Grove Farm (Williams and Newman 2006) or small sites demonstrating the norm for funerary reuse. In the case of the larger cemeteries at villa sites, they are primarily located in *Maxima Caesariensis*; this is partly due to its easterly location and the generally accepted zones of early Saxon immigration (Halsall 2011; Härke 2011, specifically 3, fig. 2). A second point to note is the demographic element to the presence of these large cemeteries. In all cases, including those outside the southeastern area, the cemeteries show use by tens or hundreds of individuals over the course of a century or more. This indicates that there was a critical demographic mass of people within these areas to populate self-sustaining cemeteries over a long period. The little published information on these cemeteries suggests a wide age, sex and social stratification to burials and indicates that there was a sufficiently large and robust enough rural society in these regions and no single families or groups burying their dead in small funerary areas.

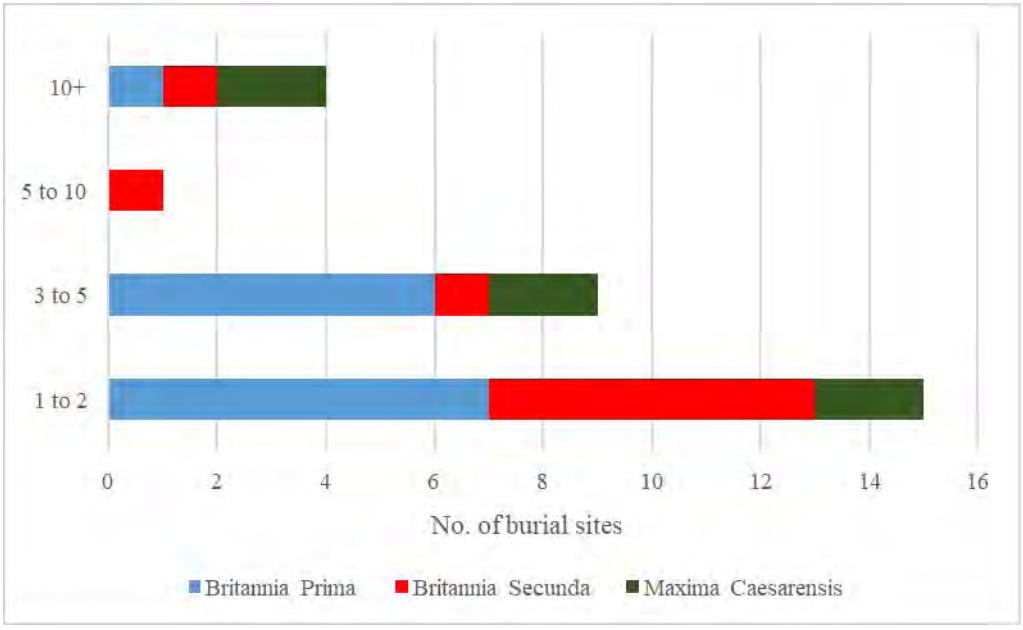

Fig. 3.23: A breakdown of funerary reuse at villa sites by number of individuals recovered where data is available (*n*=29) (J. Dodd).

3.4.4B DISTRIBUTION AND PATTERNS

There is a relatively equal distribution to funerary villa transformation in *Britannia* (figure 3.24). The majority of sites in *Britannia Secunda* are spread out across the eastern side of the province, with a notable concentration of sites in the Vale of York. Conversely, funerary reuse in *Maxima Caesariensis* is generally located along the corridor of Watling Street, concentrated north of the Weald, with only one site located on the south coast. In *Britannia Prima*, this is reflected by an increase in funerary reuse towards the north and east of the province, especially along the Cotswolds main ridge at sites where long-term occupation has been postulated. This density does not decrease towards the north, suggesting the centre of this group may lie in Central England, outside the study zones set out in this study.

Unfortunately, despite the relative confidence of these distribution maps, many of the publication records for these sites are extremely limited. This hampers large-scale reconstructions of the funerary record, especially in the case of large-scale cemeteries, most of which have not yet been published to comparable levels as continental sites.

3.4.4C DISCUSSION

Villa burials in *Britannia* have generally been addressed on a case-by-case basis with little or no wider statistical analysis. Individual burials have been explained away as victims of unrest, invasion or piracy or people crawling into the ruins to expire (Branigan 1972b; Boon 1993) rather than analysed as a phenomenon on its own (Dodd 2020, 2-3).

Burials inside villa complexes tends to be a 4th and 5th century phenomenon. This group, generally plain and without grave goods is a peculiarly British phenomenon, with most of the continental comparisons having richly furnished graves of various forms. The casual aspect of British burials is apparent from the subset of data and is a departure from earlier inhumation rites. The older tradition generally saw the placing of cemeteries separated from habitation or productive zones (Hatton 1999, 160-180), for

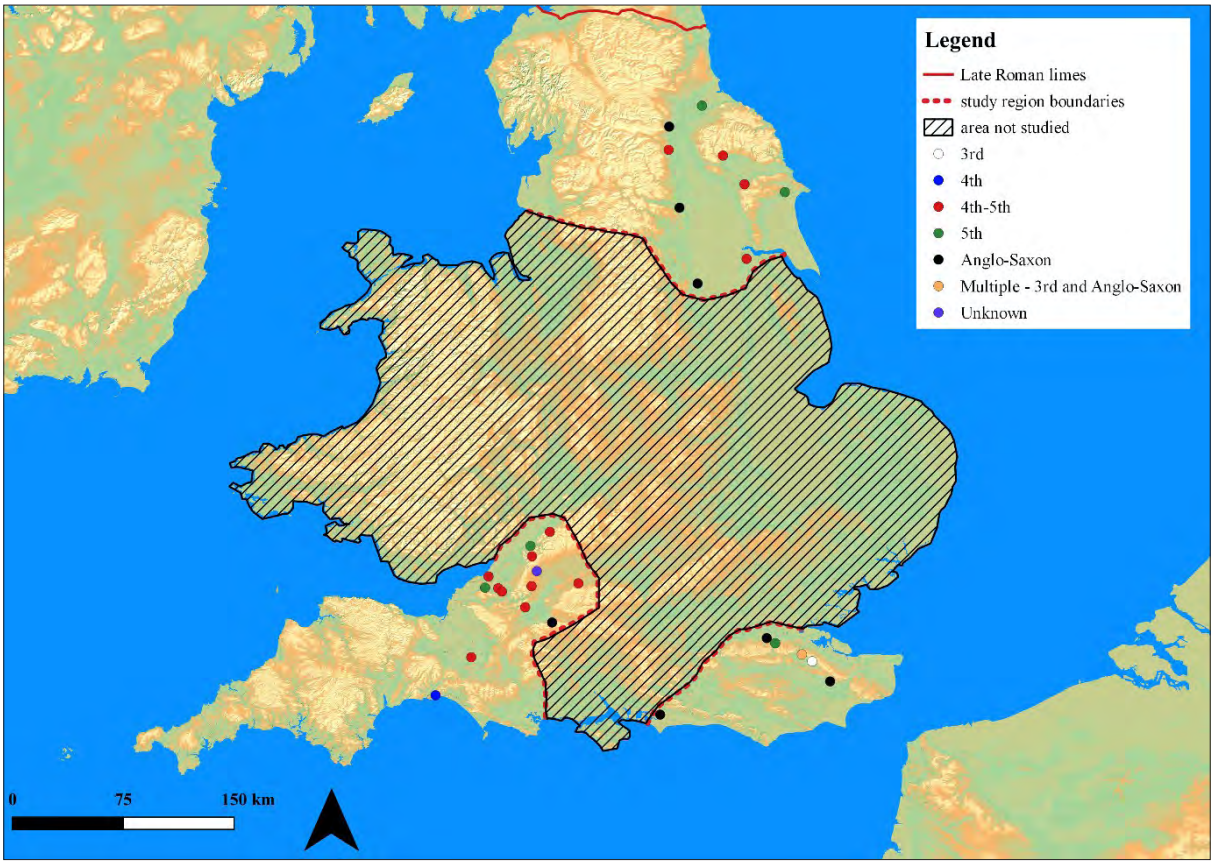

Fig. 3.24: A temporal and spatial breakdown of funerary transformation at villa sites in the British provinces (J. Dodd).

example at Keston (Philips *et al.* 1991, 1999), except in cases of child internments (Millet and Gowland 2015). These new practices represent a dramatic shift as many of these burials tend to be placed inside buildings, some of which still have active functions. This represents an overt rejection of the classical separation of the living and the dead and suggests that new moral concerns affected the rural population from the 3rd century onwards. This shift towards a closer accommodation with the dead is paralleled in the urban environment, as cemeteries begin to creep inside city limits from the second half of the 4th century onwards (Rogers 2012; Speed 2014).

The meaning of these casual burials is complex and their movement from the periphery of the site into used or utilized structures suggests that wide-ranging social change was ongoing. It seems probable that burials in this form were related to the termination rituals of entire sites or at the very least, zones within sites, with the decommissioned building being given over to burial use after its initial function was superseded. Individual site evidence, such as the three inhumations from the Eccles Bath block (Detsicas 1968) or the burial from Beadlam north range (Neal 1996), marks the end of occupation in parts of the building. This is reinforced by the same characteristics of burials in the sealing deposits of wells on villa sites (Barker 1900, 1901; Stead 1980). It may also be partly a social memory of late prehistoric practices (for example, Dent 1983) where cemeteries and settlements were often much more closely aligned. Secondary to this is the deliberate alignment of many individual inhumations or small groups of burials with the orientation of the villa building. This suggests two things; firstly, that the structures were still visible when the individuals were inhumed and chronologically sit between site formation processes and stone robbing had covered the site over, and secondly, that these burials were not 'dumped' into the ruins, but instead carefully placed. This is repeatedly demonstrated at sites across the diocese; the small cemetery at Winterton (Stead 1976) and the aligned burials at Fishbourne (Cunliffe 1971) are examples

of this development. One notable aspect of this is that the period of funerary transformation will have been concurrent with the use of the site as a quarry and recovery area, neatly illustrating the multiple trajectories that a site can take after the end of formal use.

The presence of large migration period cemeteries within the villa data set parallels developments in northwest Europe. New rural populations on each side of the English Channel were acting in similar ways, although in *Britannia*, this analysis is hampered by a lack of study of complementary cemeteries and rural settlements, which may prove fruitful to mapping the Early Saxon landscape. The presence of Anglo-Saxon chronological indicators suggests that new rural populations on both sides of the Channel were acting and thinking in the same way regarding the reuse of the Roman landscape. The reasoning behind this is unclear. There is plenty of evidence of the Saxon reuse of older sites for burial purposes (Williams 1997; 2011) and often these are not limited to Roman villas. This would suggest the symbolic use of Roman villas by the Anglo-Saxon and sub-Roman rural populations. The repeated pattern of large-scale Saxon burial sites in *Maxima Caesariensis* demonstrates a determined and ideological reuse of the symbolic landscape. This is likely a form of appropriation, claiming the landscape by burying the dead in former Roman centres, in effect laying claim to the ancestral geography of the area. This appropriation was probably served by fabricating a link with the original owners and confirming control of a particular region or estate (Schnapp 1996, 85; Williams 1997). It may also have served as an association with a heroic mythology of a site similar to those surrounding Hengist, Horsa, and Cerdic of Wessex (Lancaster 1958, 230-250).

3.4.5 CULTIC TRANSFORMATION

3.4.5A ARCHITECTURAL MORPHOLOGY

Morphologically, cultic transformation of villa complexes in *Britannia* is dominated by the appearance of house-chapels (figure 3.25). House-chapels generally take the form of small apse-like structures utilised as private chapels for a small elite. Their form is not set, and their development and morphology are generally based on Mediterranean exemplars, where private rural *oratoria* and chapels are relatively common (Cantino Wagahin 1998, 719-721; Chavarría 2004, 83-84). Box (Brakspear 1904) and Bradford-on-Avon (Corney 2002, 2003) are both poorly published and enigmatic sites that can be interpreted as falling under a broad category of house-chapels. The only well-excavated site in this sub-set of the data, Lullingstone (Meates 1979, 1987) is a definite house-chapel, utilised by the family of the owner. It bears similarities to a range of continental examples (Codou and Colin 2007 73-74; Chavarría 2018, 97-103). Box consisted of an 'altar-like fountain' recovered in the 1890s and a definitive use cannot be ascribed whilst Bradford-on-Avon has been described as a 5th or 6th century baptistery, although it bears similarities to private *oratoria* of a type common to the Spanish provinces (Ripoll and Arce 2000; 74-77).

An apsidal structure, consisting of *spolia* has been recovered at Beddingham in *Maxima Caesariensis* (Rudling 1998, 55). This was interpreted by the excavator as a pagan Saxon shrine, partly due to the association with a nearby Saxon inhumation cemetery and the prevalence of Late Roman coarse ware and ES1 pottery. This structure indicates that a pagan element in the transitional countryside of *Maxima Caesariensis* may have been in action. This enigmatic building is not overtly Christian and represents the only possible pagan cultic transformation in *Britannia*.

The two final sites; at Stancil and Kirk Sink represent a different form of cultic transformation. Both sites were poorly excavated (Villy 1912; Whiting 1941) however, they seem to demonstrate early medieval or medieval church construction, a tradition of Roman building reuse laid out in Bell (2005), with both structures dating to well after the end of the Roman period.

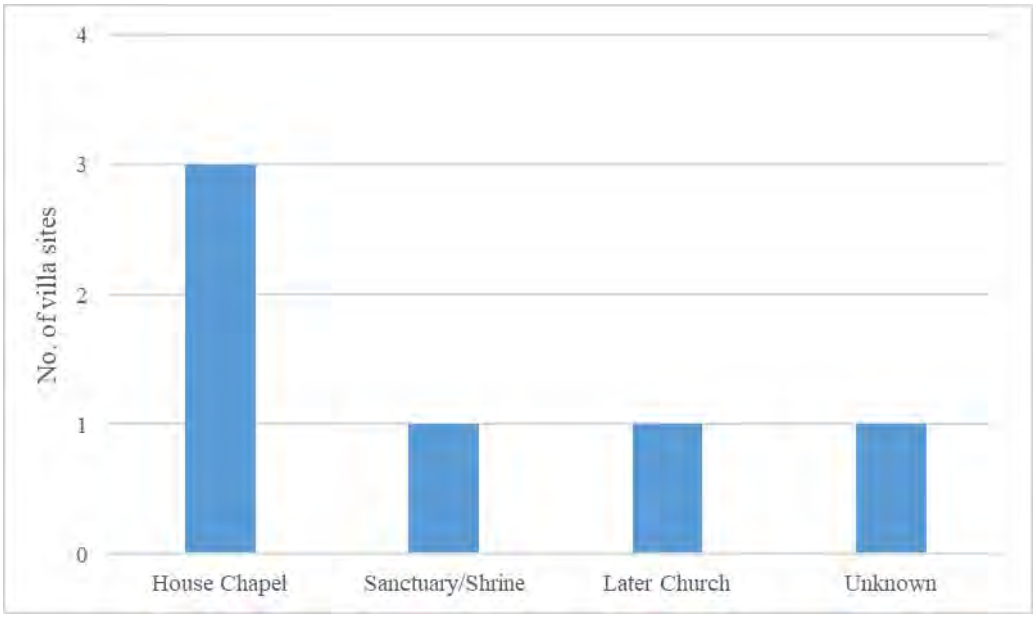

Fig. 3.25: Morphological breakdown of cultic architecture at villa sites (*n*=6) (J. Dodd).

3.4.5b DISTRIBUTION

Cultic transformation is a relatively uncommon phenomenon in *Britannia*. Only 6 sites spread equally between the three provinces under study show evidence of an altered religious function (figure 3.26). No overarching pattern is discernable in the distribution of sites; instead, it would appear that cultic transformation is driven by the individual beliefs of the owners rather than any group identity construction. The interpretation of many of these sites is somewhat suspect, primarily due to poor excavation and recording except in the case of Lullingstone, a well-recorded villa in *Maxima Caesariensis*.

Although evidence of direct cultic transformation is uncommon, this does not mean the processes of Christianisation were not in motion. A selection of other sites in this data, for example at Hinton St. Mary and Frampton, display overt Christian motifs, although not within a formal ritual setting, whilst hoards, such as Hoxne and Mildenhall (Painter 1977; Bland and Johns 1995) have demonstrated the prevalence of Christian thought at some level amongst 4th century rural elites. Both sites see Christian mosaics laid in the second half of the 4th century, with a *chi-rho* symbol found at Hinton St. Mary (Painter 1967, 21-22). The presence of these elements reinforces the evidence that Christianity at villa sites relates to the personal preferences of the villa-owner (Painter 1971). These parallels indicate that Christian individuals within the villa family unit often spurred conversion of construction, a view further supported by the presence of an alternative ritual centre in the Deep Room at Lullingstone which indicates that architectural elements in the villa were pagan well into the 4th century.

The role of cultic and Christian transformation in the rural fabric of Late Roman Britain plays a much smaller role than its parallels in *Gallia Narbonensis* and *Hispania*. Cultic transformation did not appeal to the rural elites of Late Roman and Anglo-Saxon *Britannia* in the same way that it did to those in Southern Gaul and Spain. This indicates that, in a similar vein to the Germanic provinces and *Belgica*, ecclesiastical power was not an appropriate vehicle for power and status in Northern Europe, with rural elites utilizing other forms of social expression.

The dearth of villa chapels and churches in comparison to other regions would suggest that the Christianisation of the rural landscape was not a widespread religious process in *Britannia* but rather

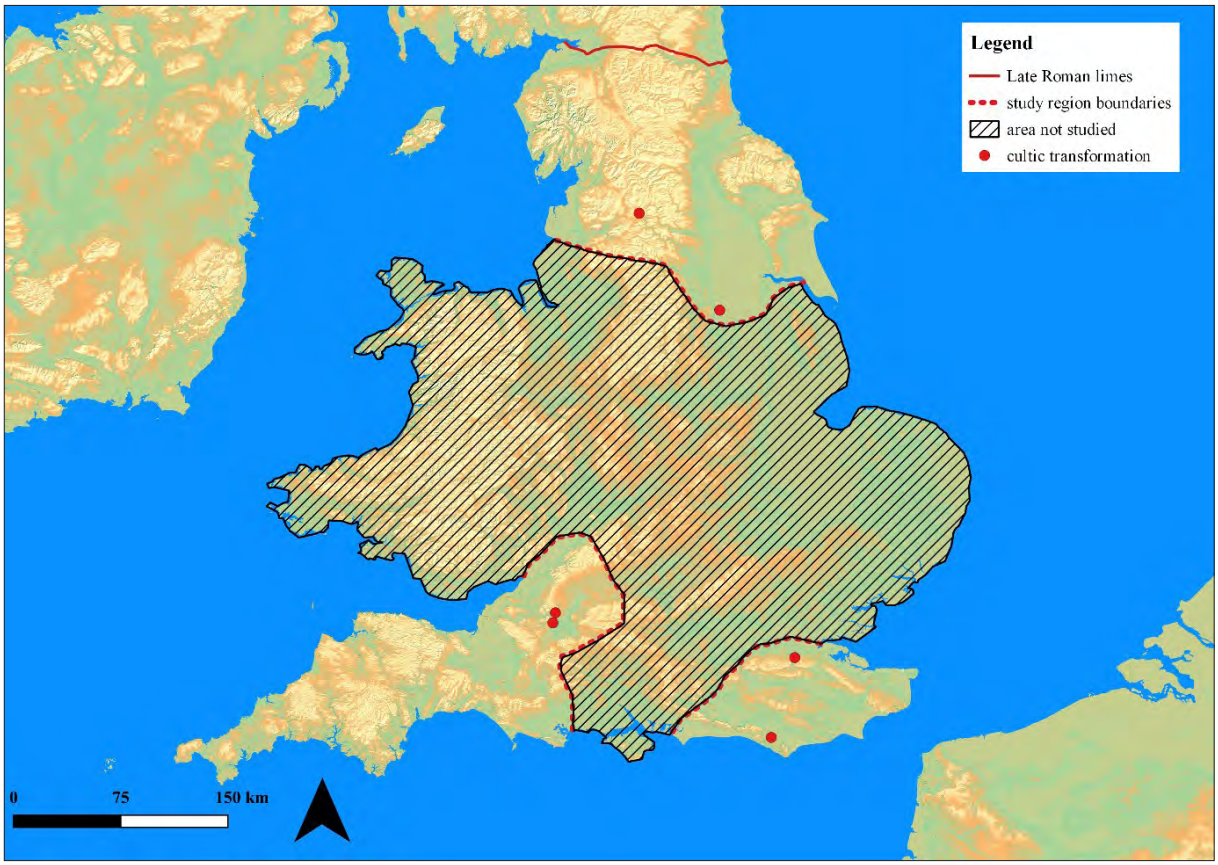

Fig. 3.26: Distribution of cultic transformation at villa sites in *Britannia* (J. Dodd).

more influenced by the social or religious beliefs of individuals or families at specific sites and even in such cases it was perhaps not a complete conversion. This is demonstrated by the dual use of Lullingstone for both Christian and pagan rituals, where the house chapel overlays an older cellar, which was utilised for pagan rituals into the second half of the 4th century. There is some debate about the penetration of Christianity into the rural fabric in *Britannia* (*cf.* Frend 2003), with little or no evidence for the survival of Christian practices in *Britannia* as a whole into the 6th century. Evidence for long-term use at pagan rural shrines well into the 5th century (Rahtz and Harris 1956; Petts 2003) suggests that in some regions, pagan rituals continued long after the end of Roman Britain. House-chapels fit into this as a generally small-scale activity by members of the rural elite, which suggests that some level of religious understanding continued. However, it is notable that only one of these sites may have lasted until the 6th century. This marks cultic transformation as a short phase in transformative trajectories and of little importance to the breakdown of rural landholding and power patterns in *Britannia*.

3.4.6 FORTIFICATION TRANSFORMATION

Fortification transformation: the installation of defensive elements such as ditches and walls, in *Britannia* is rare. A single site in this dataset, Gatcombe (Branigan 1977; figure 3.27) in *Britannia Prima* displays evidence of defensive elements in its developmental sequence. There are significant issues with the interpretation of this site and it likely that further excavation at this will identify it as a fortified small town rather than a villa complex. The primary reason for inclusion here is not the excavator's assertion that it is a villa (Branigan 1977) but rather its similarities to the fortification on the villa site at Tholey (further explored in section

3.4.6a). There is some patchy evidence from outside the study area in Britain that fortified villa sites may be present in small numbers across the diocese. Unfortunately the primary example of this, Norton Disney in Lincolnshire (Oswald 1937): a site comprising a main house surrounded by a series of multiphase enclosure ditches is not well excavated and consequently poorly understood. This leaves a significant level of ambiguity in the role, appearance and structure of fortified transformation in *Britannia* in the Late Roman period. Consequently, little can be said on the developmental sequence of this specific form of rural change.

3.4.6a Architectural morphology and temporal sequence

Morphologically, Gatcombe displays a similar defensive arrangement to the defences at Tholey in *Germania Prima*. Large, over-engineered defensive walls were erected in the mid-4th century, surrounding the *pars rustica* and presumed main house of the villa. These large walls, comparable to examples from small towns such as *Cunetio* have drawn conclusions that Gatcombe itself functioned as a nucleated rural settlement rather than a villa, although the evidence is somewhat patchy. Recent geophysical surveys have suggested that these walls extend a significant way beyond the excavated zone of the site (Smisson and Groves 2014). The problematic nature of the site does hamper discussions on the nature and choice of construction of fortified rural structures in *Britannia* in the Late Roman period.

3.4.6b Discussion

The unique nature of Gatcombe in the rural transformation in *Britannia* demonstrates that fortification played little or no role in the reorganisation of the Late Roman rural landscape. There are several reasons for this. Firstly, geographically, *Britannia* was isolated from the insecurity in the provinces close to the Rhine, with no significant frontier zones (Gerrard 2013), influencing the direction of local insecurities and the lack of significant fortified elements in the countryside. Secondly, the presence of relatively defended corridors enhanced the perception of security. A dense pattern of fortification in *Britannia Secunda* (*cf.* Collins 2012, xv, Map 1) stimulated the perception of security amongst villa elites whilst the Saxon Shore fortifications likely acted in the same role in *Maxima Caesariensis*. In this respect, *Britannia* was well served by security forces and the resulting perception of security is reflected in the lack of defensive architecture in the Roman countryside, differing significantly from the situation in Germanic provinces and *Belgica* (see section 4.5.6b), where fortification was widespread, especially in the Rhine-Maas corridor.

3.5 (Former) villas and cities: the urban-rural dynamic

The relationship between villas and urban centres in Late Antique *Britannia* has generally been seen as a clear-cut continuation of the movement of elites between their rural villas and urban *domus*. Evidence from a range of urban contexts in the British diocese suggest that the 4th century saw a range of opulent and important houses constructed at major urban centres (Faulkner 2000; Perring 2002; Durham and Fulford 2014). This has partly developed from the large corpus of new evidence, mostly from commercial excavation, which points towards a radical restructuring of urban centres in the 4th century (Rodgers 2011; Speed 2014) and a shift towards a more deserted townscape. The development of this new Late Antique townscape appears to go hand-in-hand with the traditional view of a 'golden age' of villas in the countryside. The early and mid-4th century does see the expansion of a wide range of villa sites and an increasing luxury element to many villas. However, this is not the full story. Some regions experienced no

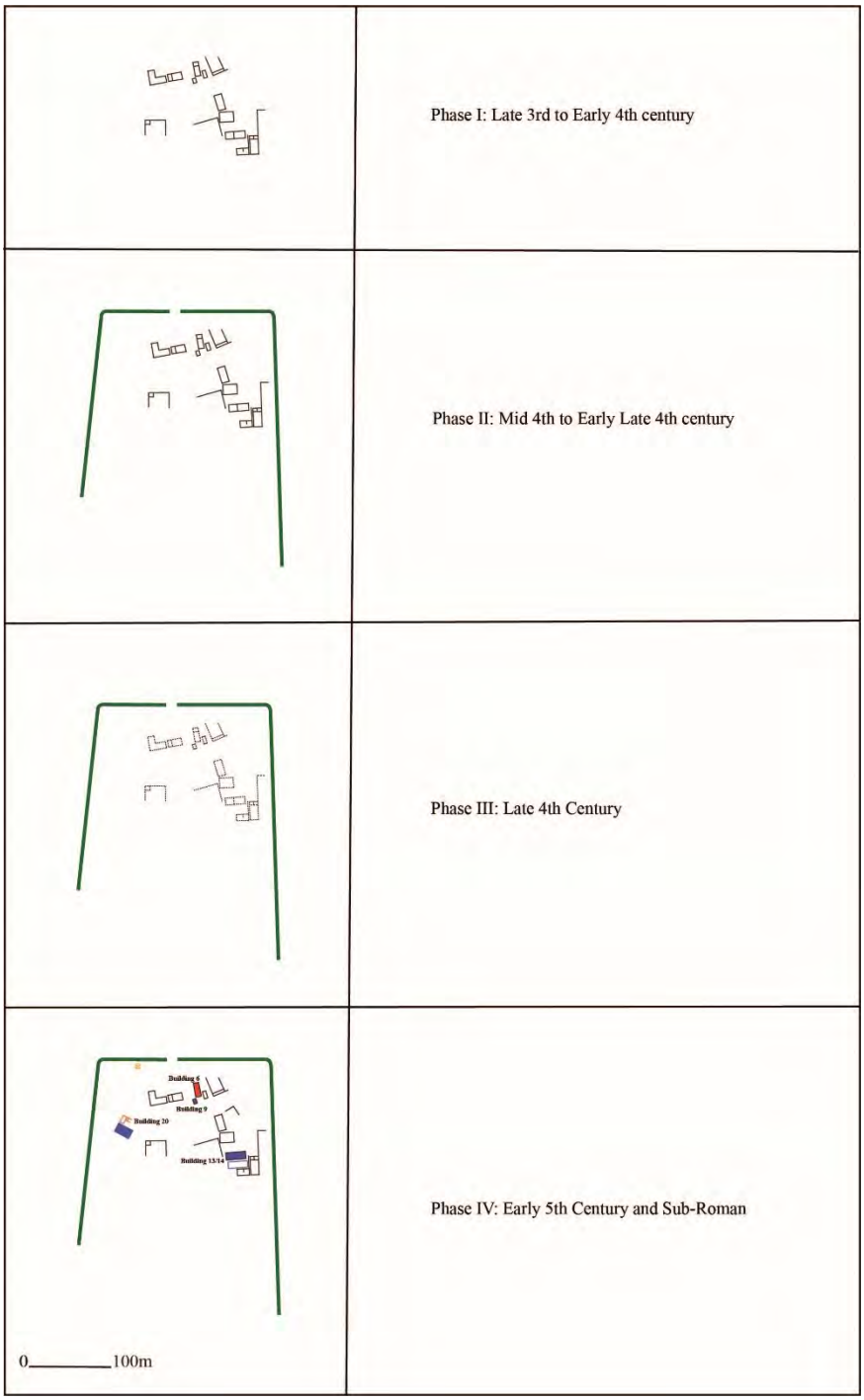

Fig. 3.27: Fortified transformation at the Gatcombe villa site: 4th and early 5th century transformation within an early 4th century fortification (J. Dodd, after Branigan 1977).

expansion and, in some cases, such as Kent and Sussex, it appears that contraction of sites and an overall abandonment phase was more characteristic. This patchy picture of *ruralisation* points towards different regions within *Britannia* experiencing different trajectories. This may be down to the individual choices of elites. For example, the situation in *Maxima Caesariensis* can be ascribed to the continuing importance of London as a diocesan and provincial capital (Williams 1993; Yule 2005 for Late Roman palatial complexes) and therefore elite urban life was considered more important than in York or Chichester, regional centres in zones that experienced a boom in villa construction.

Shifting patterns in the arrangement of elite power between the countryside and urban centres in Late Roman *Britannia* is a test case for regional variety. Each of the sub-regions of the British diocese covered in this study demonstrate varying trajectories. *Britannia Prima* and *Britannia Secunda* appear to experience relatively wide-ranging booms in villa development whilst the opposite is true in *Maxima Caesariensis*. This points towards regional variation, with local elites drawn to the important centre in London in a way not visible in Cirencester or York. This new dynamic between the countryside and the city neatly explains the villa pattern present in the data collected for this study and somewhat supports the urban evidence from British cities. What cannot be explained away is the general collapse of this system from the late 4th century onwards. Evidence from both urban contexts (Speed 2014) and villas points towards a general rejection of this system. Failing high-status rural sites and a lack of wealthy urban residences does indicate that elites were no longer able to act in traditionally 'Roman' forms and were being forced into other avenues of social expression. This shift may manifest itself in the development of new social groupings (see section 6.3.2) or the disinvestment and movement of elites from *Britannia* to other areas of the Roman West, where investment may have been considered safer.

3.6 REGIONAL CONCLUSIONS

Traditionally, *Britannia* has been viewed through an individual prism separate from both the Southern European study zone and the continental northwestern provinces. Although this has been taken to extremes at points, the evidence laid out in chapter 3 does indicate that *Britannia* experiences a significantly different trajectory from the other study regions. In simple terms of occupied villas and abandonment rates, *Britannia* experiences a near complete collapse of settlement in the final quarter of the 4th and early 5th centuries (figure 3.4), although the picture is somewhat patchy given the disparate and fragmented nature of the evidence from the three areas of the study region. Despite this common late development, there is clear variation between the Romanised south of the diocese, where villas undergo transformation earlier and enter de-sophistication trajectories, especially in *Maxima Caesariensis* compared to the less Romanised province of *Britannia Secunda*, where the evidence points towards an expansion of agricultural production and an increase in connectivity and Romanised material culture throughout the 4th century. This is typified through finds of high-status material such as the fragments of Egyptian glass from several bowls at Ingleby Barwick, which suggest that elements of the villa landscape of *Britannia Secunda* were more connected in the late 4th century than some other areas of the diocese. This long-distance connectivity suggests that the contact with the military in Northern England may have allowed higher status elements to be shipped to the region, rather than the more mundane local or regional goods such as glass from the Hambach industries. This demonstrates that on a more holistic level the three studied zones of *Britannia* indicate that sub-diocesan differences are apparent within the island and that referring to a 'British experience' within the framework of villa transformation is unhelpful.

The non-agrarian rural output from these sites, such as metalwork, leatherworking and salt is also worth a closer examination. Section 3.4.3b.ii illustrates the percentage and statistical representation of this; however, the implications of this are yet unclear. It would suggest that that rural networks and settlement structures survived to some degree into the late 4th century, allowing the economic agents present at villa sites to purchase and maintain non-agrarian elements, such as metalwork or leatherwork at other forms of rural settlement. This continuity of exchange patterns in the British countryside requires much more work, including a broad-based study of roadside settlements. However, it does seem that such a model prompted British villas to experience a different, less economically focused facet of transformation as opposed to the northwestern continental provinces, where exchange patterns and local networks were disrupted beyond repair in the 3rd century.

Chapter 4 - *Germania Secunda* and the Belgic hinterland

4.1 GENERAL INTRODUCTION

This chapter will examine the regional trajectory of transformation and abandonment in *Belgica* and the Germanic provinces. It will start by introducing the rural landscape setting and regional historical background. After this, the various morphological and typological variation in the transformation of villas in *Belgica* and the Germanic provinces will be explored and analysed in detail.

4.2 THE ROMAN RURAL BACKGROUND

Archaeologically, the tract of land between the Rhine and the Seine encompasses a diverse set of rural landscapes including both non-villa zones and villa landscapes. The study region can be divided into four broad settlement zones: a non-villa landscape in Flanders and the Southern Netherlands, a densely exploited villa landscape between Bavay (*Bagacum*) and Cologne (*Colonia Claudia Ara Agrippinensium*), a highly Romanised and urbanised zone in Picardy and the sparely population Eifel-Ardennes highlands, bisected by the highly Romanised Moselle Valley, centred on the important urban centre at Trier (*Augusta Treverorum*). This diverse study region roughly corresponds to the Late Roman provinces of *Belgica Secunda*, *Germania Secunda* and parts of *Belgica Prima* and *Germania Prima* (figure 4.2). There are likely different patterns in Late Antique villa transformation in the unstudied zones of *Germania Prima* and *Belgica Prima*. However, for the purposes of this study, it is assumed that the sections of these provinces that have been examined are representative of the wider transformation patterns.

The villa landscapes of *Belgica* and the Germanic provinces are concentrated in two distinct zones: the loess belt, stretching from Amiens to Cologne and the Moselle region. The loess belt was densely occupied during the Roman period (Jeneson 2011) with a villa system developing in the 1st and 2nd centuries to exploit the fertile soils of the region (Haselgrove 2011, 52-54; Gaitzsch 2011; Habermehl 2014; Reddé 2018). Towards the west, in the late province of *Belgica Secunda*, the density of villa settlement appears to decline. However, this likely reflects excavation bias rather than reality, with aerial photography having been utilised as the primary vehicle for rural site identification from the late 1950s onwards (for example Agache 1964; 1978; 1983; Agache and Bréart 1975). A second villa landscape was located in south of the study area. Villa settlement developed in the Moselle region in the 1st and 2nd century, exploiting the rich farmland of the *civitas* of the *Treveri*.

Surrounding these two relatively distinct villa landscapes are a series of primarily non-villa landscapes. To the north lay the Batavian and Cananefatian *civitates* and a military corridor along the Lower Rhine and Maas rivers. Villas are not completely absent from this zone (Van Dockum 1992; Vos *et al.* 2017) although rural settlement is primarily indigenous in character (Vos 2009; Heeren 2009; De Bruin 2019). A second non-villa landscape was centred on the Flanders and Meuse-Demer-Scheldt region and was dominated by traditional forms of landscape exploitation (De Clercq 2011; Roymans and Derks 2011, 33).

The economic basis for the villa landscapes of Northwest Europe predominantly relied upon the conversion of surplus agricultural resources into capital via market exchange (Roymans and Derks 2011,

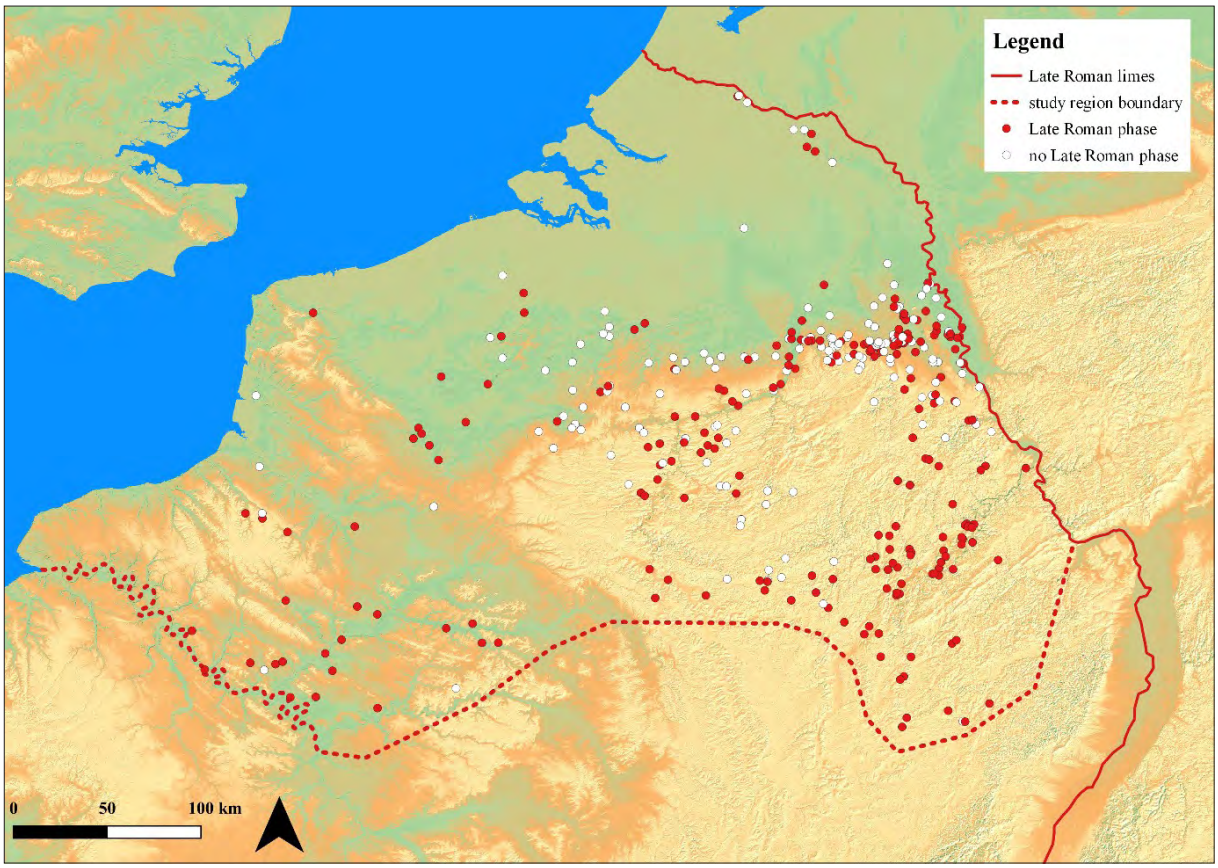

Fig. 4.1: Excavated villa sites in the *Belgica* and the Germanic provinces differentiated by presence/absence of a Late Roman occupation phase (J. Dodd).

16-17). Rural markets in the northwest are intimately tied to the presence of the military community on the Rhine and it has been assumed that the loess belt settlements and to a lesser extent the Treveran villas had a vital role in provisioning these (Wightman 1985, 148-157; Roymans 1996, 59; Rothenhöfer 2005, 54-55; Brüggler *et al.* 2017; Reddé 2018). These villa landscapes were further supplemented by a range of smaller nucleated settlements such as Taviers or Liberchies and larger settlements such as Jülich (*Iuliaum*), Maastricht (*Mosa Traiectum*) and Heerlen (*Coriovallum*). These large secondary centres have been variously referred to as *agglomerations secondaires*, *vici* and small towns (*cf.* Petit and Mangin 1994). These nucleated settlements served as focal points for the central collection and market exchange of agricultural surpluses (Roymans and Derks 2011, 19) although it is unclear whether the large 1st and 2nd century *horrea* (for example, Mertens and Vanvinckenroye 1975) excavated in these sites were state-owned or privately managed (Dubouloz 2008).

This settlement pattern did not survive the 3rd century intact (Heeren 2009, 49-74; 2015; Vos 2009, 89-99). The second half of the 3rd century is characterised by radical changes in the rural settlement pattern with much of the countryside abandoned (Drinkwater 1983; Heeren 2015). Widespread depopulation of the area north of the Tongeren-Cologne road was coupled with severe abandonment rates at sites (Gechter and Kunow 1986; Lenz 1999; Van Ossel and Ouzoulias 2000) with little or no late 3rd-early 4th century material recovered (Heeren 2015, 274-278). The 4th century landscape was much less densely occupied, with entire zones devoid of population centres. Former urban centres were fortified whilst smaller nucleated settlements were either abandoned or transformed beyond recognition (Johnson 1983; Van Ossel 1992). Within this new landscape, villas survived south of the *Via Belgica*, although many were drastically transformed whilst villas in the territory of the *Treveri* survived better, partly buoyed by an Imperial administrative presence until at least the 380s (Heather 1995, 165-175).

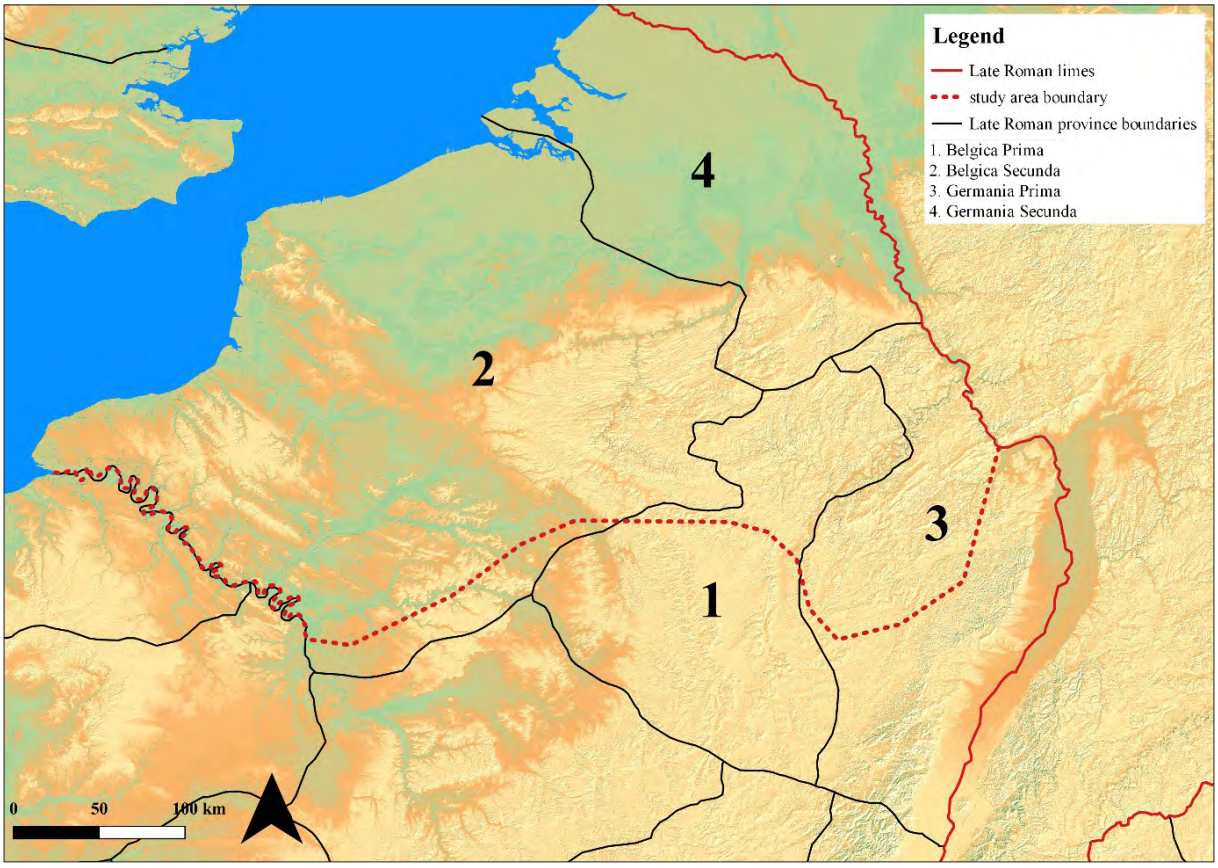

Fig. 4.2: The four northwestern provinces of the Diocese of the Gauls c. AD 350 set against the study area (J. Dodd).

4.3 HISTORICAL INTRODUCTION

The northwestern continental provinces of the Roman Empire entered the period under study as an integrated region, tied intimately to the wider Roman political and economic system (Wightman 1985, 157-165) and significantly buoyed by the economic stimulus of the army on the Rhine (Roymans and Derks 2011, 16-19). The region was made of up of two provinces; *Germania Inferior* and *Gallia Belgica* and was further divided into a number of *civitates* (Bogaers 1972). The area experienced significant economic growth and social stratification with the central sectors of the study area developing into a dense villa zone (Jeneson 2011, 59-60). Evidence suggests that the rural economy peaked in the late 2nd century, entering a period of contraction from the beginning of the 3rd century, eventually terminating in the second half of the century (Heeren 2009, 49-74; Vos 2009, 89-99).

The entire region suffered significant economic, political and social disruption in the second half of the 3rd century, with the most intense period coming between 250 and 270, under the so-called 'Soldier-Emperors' (Willems 1984, 273). Traditionally, especially through the lenses of 'Germanic' archaeological traditions, a *limesfall* has long been postulated. The Rhine was abandoned as a frontier (Mommsen 1894, 150-152; Van Es 1981, 47-48) and widespread destruction was attributed to barbarian incursions. Recent works however have begun to question the validity of much of this interpretation (Heeren 2016 for the lower Rhine; Reuter 2007, 85–86 for the Rhaetian *Limes*). The Rhine does appear to have been partially abandoned in places, probably in line with the abandonment of the *Agri Decumates* to the south under Gallienus (De Blois 1976, 250). Evidence suggests that much of the countryside of both *Germania Inferior* and *Gallia Belgica* was significantly depopulated with many

sites abandoned (Gechter and Kunow 1986; Heeren 2015), although this less marked south of the Tongres-Cologne Road (Lenz 1999).

The situation was stabilised under Diocletian and the Tetrarchy. The Lower Rhine was reoccupied and reorganised in 297 by Constantine Chlorus, although this was portrayed as a military campaign (*Pan. Lat.* VIII, 5). Some of the region was occupied by Franks, specifically the Delta region (De Boone 1954, 58), whilst Boulogne (*Bononia*) and its hinterland were partially controlled by the usurper Carausius (*Pan. Lat.* VI, 8; Wightman 1985, 199-200). The reorganisation process created four new provinces and grouped them into a diocese under the supervision of a *vicarius* based at Trier (Wightman 1985, 202-203). Accompanying these administrative reforms were a series of economic and social realignments as the population of the provinces adjusted to the new realities. Defensive circuits are evident at a majority of urban sites from the late 3rd century onwards (Butler 1959; Johnson 1983) with most cities fortifying a reduced core of settlement, such as the case of Xanten (Otten and Ristow 2008) and Tongeren (Vanderhoeven 2017). Some urban sites, especially in the north of the new diocese were abandoned completely (Koster, Peterse and Swinkels 2002): for example, the *civitas* capitals at Voorburg *(Forum Hadriani*) and Nijmegen-Waterkwartier (*Colonia Ulpia Noviomagus*). This was coupled with the development of a new military network along strategic roads and rivers, such as the Maas or the *Via Belgica*, both of which were heavily defended (Brulet 2017), whilst the Rhine *limes* were reduced in intensity (Heeren 2018). The rural hinterland of the diocese saw an increase in fortification, with the establishment of *burgi* (Southern and Dixon 1996, 127-147; Brulet 2017, 40-41), many of which are close to transforming or abandoned villa sites. The Rhine *limes* was maintained throughout the 4th century, with a number of campaigns mounted against groups on both sides of the river, notably during a period of consolidation and reorganisation under Julian (*Amm. Marc* 18.2.3; Drinkwater 2007, 241-246).

The region drifted slowly out of Roman control from the late 4th century onwards. The defence of the *Via Belgica* was maintained until at least the last decade of the 4th century (Wightman 1985, 207-208; Brulet 1995). The Rhine was stripped of regular troops by Stilicho in 401-402 for service in Italy (Claudianus, *De Bello Gothico*, 419-429) whilst it has been argued that he must have arranged *foederati* or *laeti* agreements in *Germania Secunda* (Roymans 2017, 66-67) before the withdrawals. Despite this neat model, there is no evidence of a parallel arrangement in Britain, which also saw major troop withdrawals at the same time. The Middle Rhine *limes* collapsed after an incursion by a mix of 'Germanic' warbands in 405-406 (Heather 1991, 199-213; Kulikowski 2000, 325-345) which drastically upset the stability of the northwest (Heather 2017, 17); it appears that much of the political and administrative organisation had moved southwards by this point (Heather 1995, 165-175). This situation was further confused by Constantine III. He invaded Gaul from Britain in 407-408 and concluded new agreements with the 'Germanic' groups now established in Lower Germany as well as raising *foederati* forces amongst them (Zosimus, *Historia Nova* 6.2.4; Drinkwater 1998, 282; Roymans and Heeren 2015, 557-558), most of which were eventually taken over by the usurper Jovinus (Hoffman 1995, 561). Amidst this chaos, Frankish groups began to settle in the abandoned territories of *Germania Secunda* and the Rhine valley, with some of them achieving a form of legitimacy as *foederati* from Constantine III. Further alliances and agreements were conducted by Aetius and Valentinian III in 428-430 and again during the Hunnic invasion in the early 450s (Heeren 2017, 164; Roymans 2017, 69), although by this point, the northern areas of Lower Germany had passed out of Roman control, with the rest of the region soon to follow. The Frankish settlements in *Germania Secunda* eventually formed the core of the Merovingian kingdom (Dierkens and Périn 2003).

4.4 TRANSFORMATION ANALYSIS

This chapter primarily consists of an analysis of villa transformation in the northwestern provinces of the empire. In an identical format to the layout in section 3.5 illustrated in chapter 3, the remainder of this

chapter will mirror the layout and analysis in order to develop meaningful comparative conclusions. The northwestern study region consists of 388 sites spread across the four provinces shown in figure 4.2 with 222 of these sites displaying a Late Antique occupation phase and transformation in the Late Roman and Early Frankish Periods.

4.4.1 GENERAL TRENDS

There are several cross-provincial trends within the north Gallic data set. Primarily these relate to long-term trajectories of abandonment and reoccupation and illustrate several trends noted in other works within the field of villa studies.

4.4.1A REGIONAL ABANDONMENT TRENDS

The depopulation of Northwest Gaul has long been a key element to Late Antique archaeology in the region. Traditionally this has been put down to barbarian raiding although this is no longer the academic consensus (*cf.* Heeren 2017, 155). Studies have repeatedly shown widespread, if differing regional patterns of depopulation and abandonment (Lenz 1999, 78-82; Van Ossel and Ouzoulias 2000, 136-138; Heeren 2018, 140, Fig. 12.3). This has been complemented by large synthesis studies in the Lower Rhineland and loess belt (Gechter and Kunow 1986; Lenz 1999), the MDS zone and the Dutch River Area (Heeren 2009; Vos 2009; Van Enckevort, Hendriks and Nicasie 2017) establishing scale and temporal variability. In essence, the data illustrated in figure 4.3 reinforces these perspectives, demonstrating a deep decline in occupation densities in the late 3rd century with the regions closest to the Rhine suffering the greatest drop in density. In contrast with the sharp collapse of occupation in *Germania Secunda*, site density in both *Germania Prima* and the Belgic hinterland appear to have escaped relatively unscathed with the number of occupied villa sites suffering little or no decline.

In this study, abandonment is observed repeatedly throughout the period; however, the initial steep 3rd century decline is not a permanent element to the development of the villa landscapes. Fourth century villa zones are characterised by a stabilisation and slight recovery in *Germania Secunda* and to a lesser extent, *Belgica Secunda*. In *Germania Secunda,* this takes the form of an early 4th century occupation level 63% lower than the early 3rd century total number of occupied sites. Despite this initial stabilisation, recovery is not a long-term phenomenon. All four provinces enter a period of decline from the second half of the 4th century onwards, although a number of sites do survive well into the 5th and in some cases the 6th century. Unlike *Britannia*, there is no catastrophic regional collapse of villa occupation in the late 4th and early 5th centuries in *Germania* and *Belgica*. Occupation continues at a number of sites across the region with increasing Frankish migration and settlement affecting the data set (see 4.4.2).

4.4.1B REGIONAL REOCCUPATION TRENDS

The collapse of villa occupation rates in the 3rd century is somewhat offset by the reoccupation of sites for a secondary use phase, shown in figure 4.4. A significant period of secondary site use begins in the early 4th century as some sites abandoned in the late 3rd century are reoccupied. This includes sites reoccupied in both a 'classical' style and those reoccupied in new, radically different styles. This secondary occupation, in line with the stabilisation and recovery noted in figure 4.3 represents the only period in Late Antiquity where site occupation growth exceeded abandonment, indicating a process of recovery in the rural economy. This recovery is short however, with reoccupation declining by 325-350

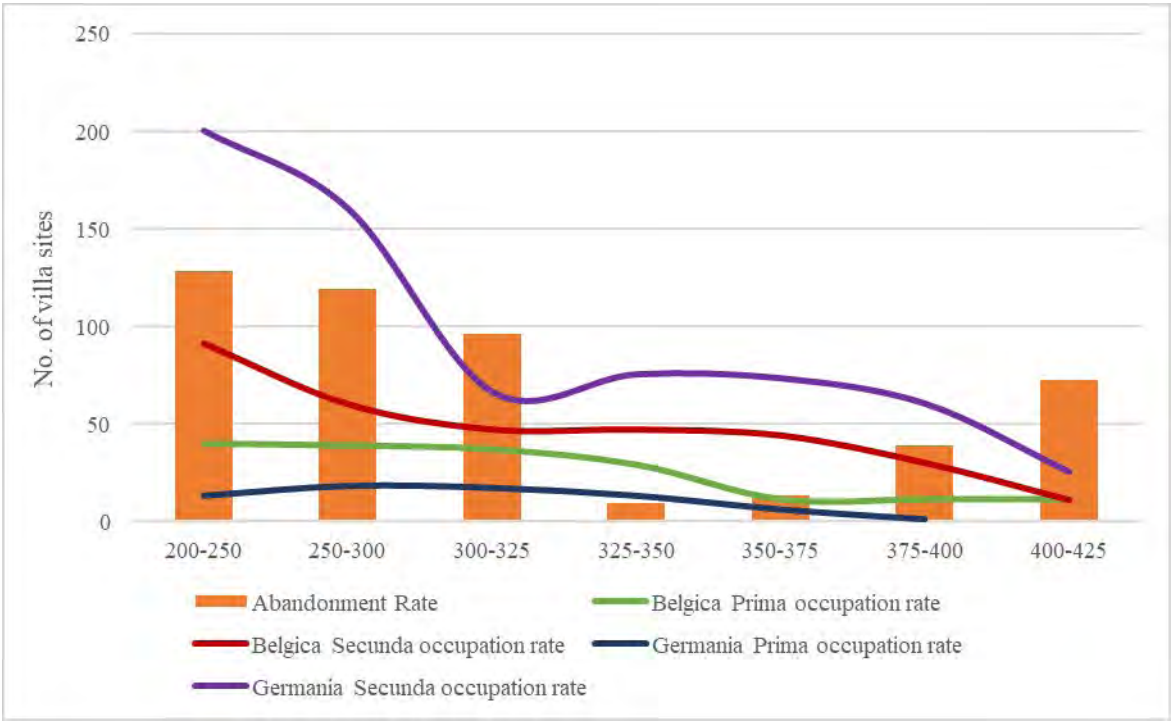

Fig. 4.3: The Late Roman villa abandonment curve set against the provincial occupation rates for villas, where data is available (J. Dodd) (n = 344).

and rising again towards the end of the century, despite increases in the abandonment rate. There was no 'renaissance' of villa occupation as witnessed in *Britannia* (*cf.* Scott 2000, 166-172), with continuity and occupation increasingly concentrated in isolated clusters in the Somme Basin, along the loess belt and in the hinterland of Cologne by the late 4th century.

Notably, reoccupation of villa sites in the 5th century is not widespread in this data set. Early 5th century reoccupation is low, despite widespread evidence for 5th century immigration in the region (*cf.* Goetz 2002; Heeren 2017). Most Frankish reuse of villa settlements comes from the late 5th century onwards, primarily in the form of funerary use, something explored further in section 4.4.5d.

4.4.1c Regional transformation trends

There is significant variation in the density of transformed villa sites throughout the period under study. Minima and maxima in the appearance of transforming villas are apparent from the late 3rd century onwards (figure 4.5). Two primary peaks are visible, the first dating to the late 3rd and early 4th centuries and the second to the late 4th century.

The first peak dominates the data set in the late 3rd and early 4th centuries with all four regions experiencing a significant degree of transformation, although notably in *Belgica Secunda* this period does not see the largest number of newly transforming villas. The rural landscapes of the late 3rd and early 4th centuries were under significant socio-economic stress. The abandonment of many villas in *Germania Secunda* (figure 4.3) and the increasing level of change at surviving sites represents the wide-ranging reorganisation and partial recovery of the villa system and the rearrangement of military supply and transportation networks, although the practicalities of this are still somewhat poorly understood.

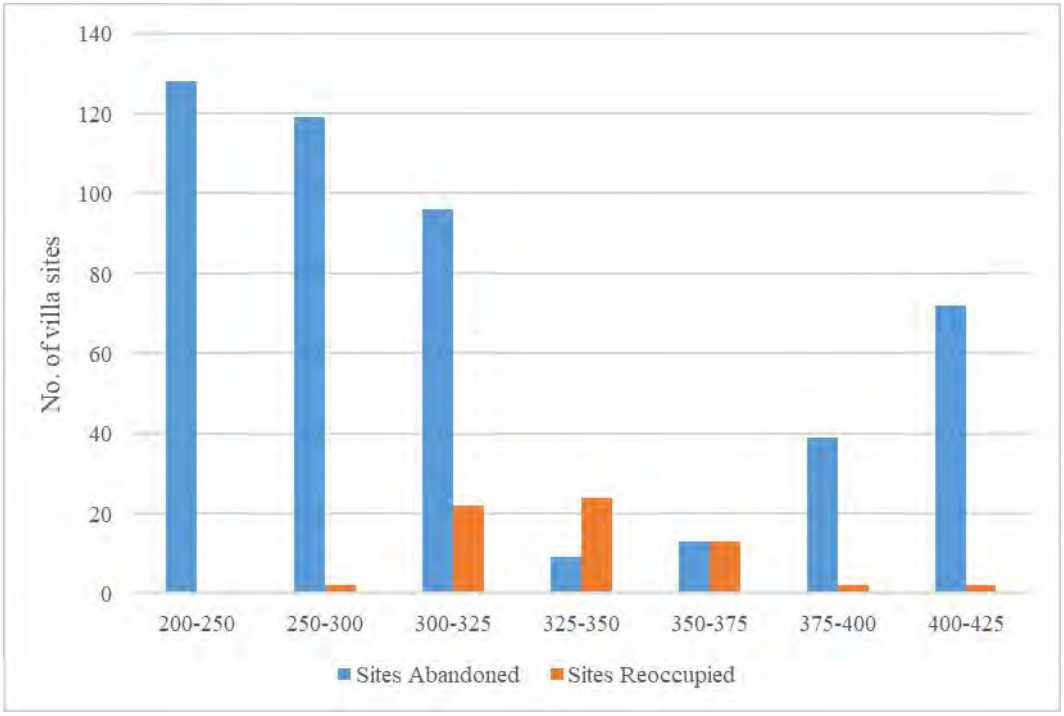

Fig. 4.4: A breakdown of villa sites by end of primary use phase and start of secondary use phase at those sites where data is available in the Belgic and Germanic provinces (J. Dodd). (*n* = 344).

Although a slight degree of stabilisation is present in occupation rates in the 4th century, this level of stability is not borne out in figure 4.5, where the data indicates an increasing degree of transformation, peaking in the last quarter of the 4th century. At first appearance, this increase in the quantity of transformation does not increase into the 5th century. Instead, the data presents a sharp decline in new appearances of villa transformation. This development suggests that that some kind of socio-economic threshold had been crossed in the Germanic provinces and *Belgica* that precluded villa transformation as a socio-economically viable strategy for landowners. This coincides with the beginning of the end of direct Roman control in the Germanic provinces and *Belgica*, specifically with the movement of the diocesan administration to *Narbonensis* (Heather 1995, 165-175) and the gradual withdrawal of regular troops from the 390s onwards. A significant point in the data is the notably high level of transforming villas throughout the 4th century. The appearance of transformation continues to increase throughout the middle of the 4th century, giving more evidence against any revival of the socio-economic landscape of the villa and indicates that, despite stabilisation, the rural economy was under significant pressure.

Figure 4.5 also illustrates the regional variation in appearance. Despite the evidence in figure 4.3 suggesting that villa settlements in *Belgica Prima* and *Germania Prima* survived relatively intact from the 3rd century, figure 4.5 demonstrates that both regions have high peaks of transformation appearance in the 4th century. Both regions may have escaped the worst of the disruption in the 3rd century but neither province was immune to the wider changes to the rural landscape and both groups suffered economically and socially from the collapse of the villa landscape further north.

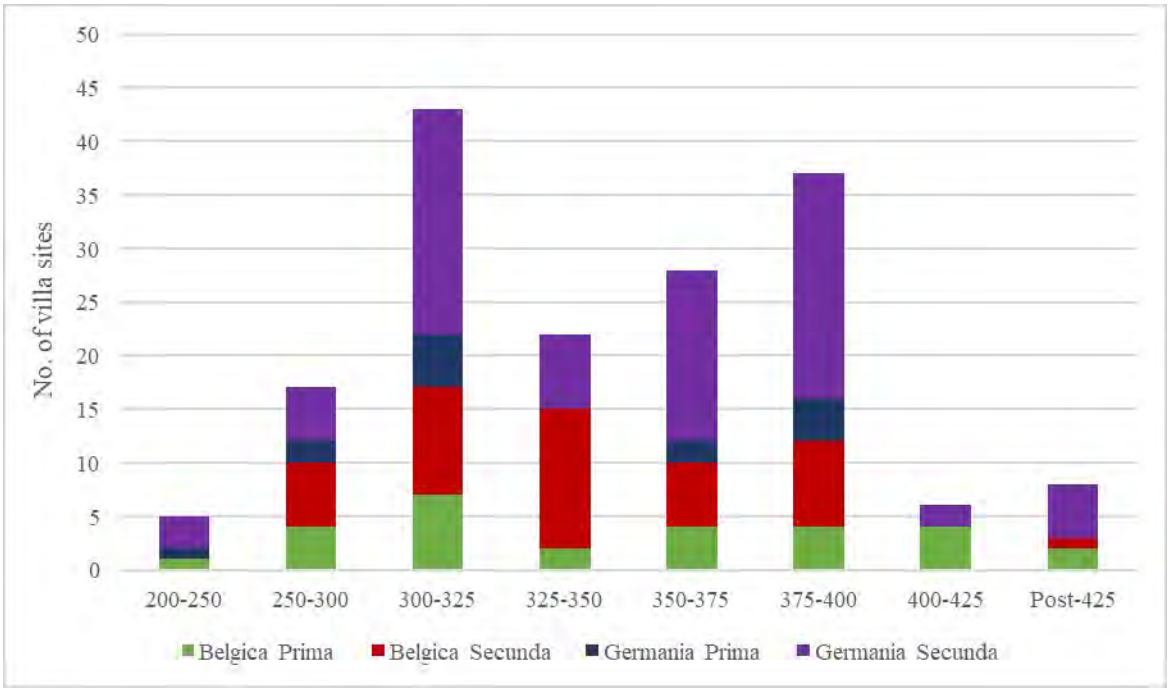

Fig. 4.5: A breakdown of the first appearance of transformed occupation at villa sites where data is available in the Belgic and Germanic provinces (J. Dodd). (n = 167).

4.4.2 HABITATIONAL TRANSFORMATION

Habitational transformation, such as the reoccupation or alteration of villa complexes is the most common form of change at sites in the northwestern provinces. A selection of 109 settlements display evidence of habitational transformation in various forms with the reuse or alteration of villa terrain found in all four provinces. The large sub-set of the data typically presents the most unsophisticated form of change and includes both radical shifts in occupation patterns and the functionality of sites as well as domestic-scale production and storage capacity.

4.4.2A HABITATIONAL MORPHOLOGY

Morphologically, habitational transformation in the Germanic provinces and *Belgica* is extremely varied. It encompasses everything from sporadically reused hearths and rooms to the erection of large post-built structures or *Grubenhäuser*. Architecturally, it can be divided into two broad groups. Firstly, sites primarily utilising earlier structures, either through reoccupation, for example at Ahrweiler-Silberberg (Fehr 2003), or alteration, such as the case at Emptinne-Champion (Van Ossel and Defgnee 2009). The second group consists of sites primarily using newly built structures, often but not exclusively post-built or sunken-feature in nature, for example at Neerharen-Rekem and Rouvillers. This second group makes up a significant minority of sites, with 32% of habitational sites surveyed displaying evidence of primarily post-built structures (table 4.1).

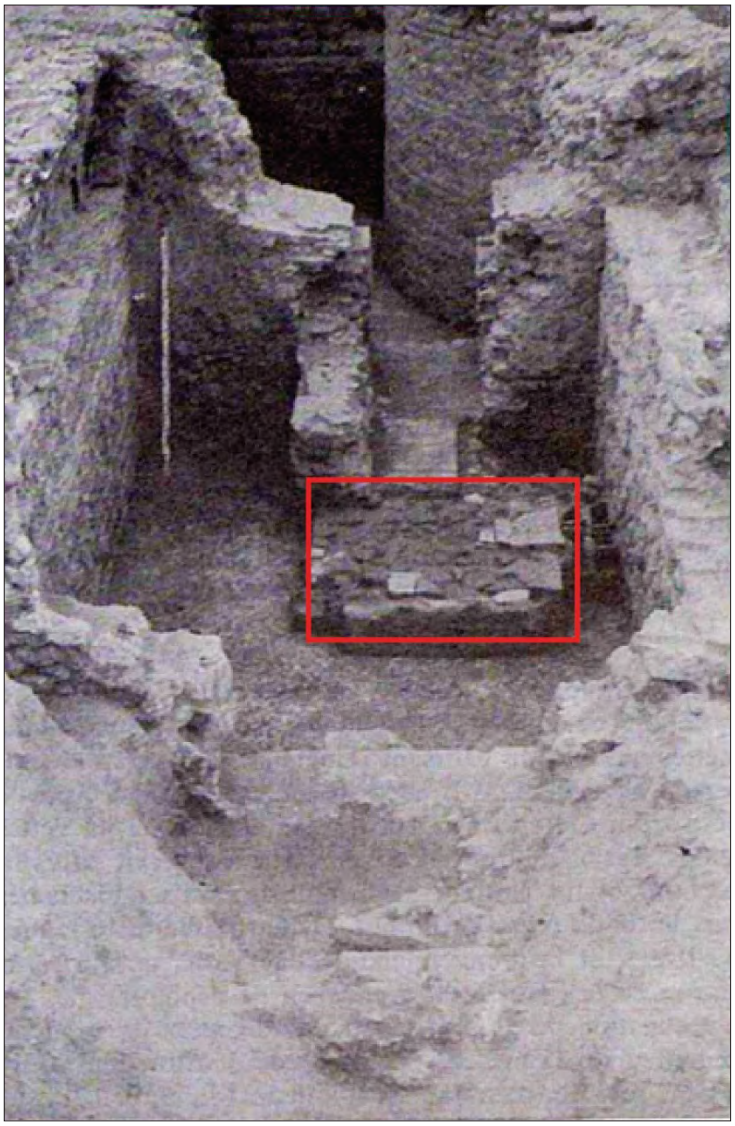

Fig. 4.6: Alteration and renovation within a villa structure: a tile hearth, highlighted in red, inserted into a corridor in the mid-4th century at Limetz-Villez (Dodd, improved after Van Ossel, unpublished photo).

site type	number of sites
Primarily new constructions	32
Primarily existing structures	67
Unknown	11

Table 4.1: A breakdown of habitational transformation at villa sites by type of occupation (J. Dodd).

a) Alteration and renovation

The largest morphological group is related to the reoccupation, reuse, or alteration of already existing structures. Architecturally, occupation generally centres on older structures, either the main house, for example at Limetz-Villez (Van Ossel and Ouzoulias 1989; figure 4.6) or in a lesser number of cases, on ancillary structures. A range of activities are present at these sites, for example the alteration of room functions with the insertion of hearths or domestic ovens into former reception rooms. In some cases, high-status elements such as mosaics and hypocausts were demolished and converted, for example at Weiler-la-Tour.

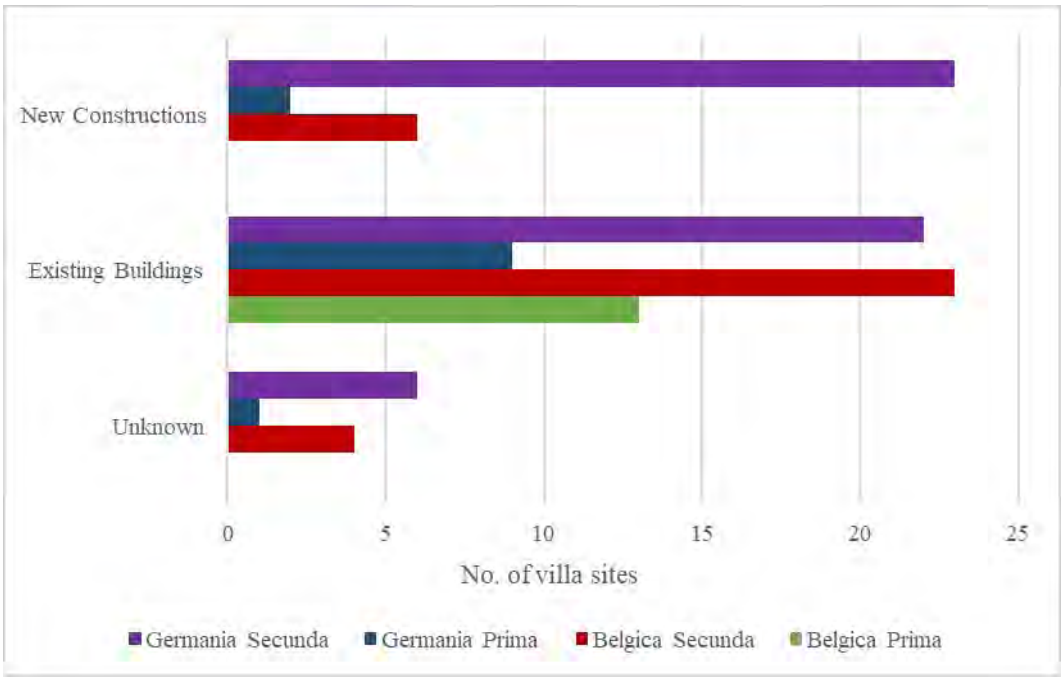

Fig. 4.7: Breakdown of habitational transformation at villa sites by type of occupation and province (*n*=109) (J. Dodd).

This group, consisting of 67 sites is generally located to the south and west of the study region (figure 4.7) with the bulk of these sites located in the south of *Germania Secunda*, *Germania Prima* and the two Belgic provinces. Temporally, these sites also differ from newly built settlements in that they are marked by continuous, or near continuous occupation trajectories. A larger number of this sub-class of transformation survives the 3rd century without abandonment whilst those demonstrating abandonment phases tend to experience shorter occupation gaps in the 3rd century with most reoccupied within 50 years of the end of primary use phases.

b) Wooden constructions

Although the use of existing structures within the framework of habitational transformation is widespread, a substantial minority of sites demonstrates evidence of new, radically different construction styles (figure 4.8). This change has been noted in previous studies (Van Ossel 1992, 125-126; Van Ossel and Ouzoulias 2000, 145-146) although it has rarely been quantified. It is characterised by the wide-scale abandonment of existing structures in favour of new wooden buildings, either constructed on rubble bases consisting of the 3rd century buildings or clustered further away. The major shift at these sites is the change from stone to wooden construction, an alteration often viewed through the lens of rural impoverishment (Van Ossel 2006). The new buildings are architecturally diverse but are often represented by byre houses (*cf.* Hamerow 2002, Fig. 2.22, 49), generally categorised as variations of Wijster A and B houses (*cf.* Heeren 2015, 160-161) and *Grubenhäuser*, often referred to as sunken-feature buildings (SFBs) in English literature (Heidinga and Offenberg 1992, 61). The presence of these buildings is often at a distance from the older Roman structures, for example at Neerharen-Rekem (De Boe 1985; 1986; figure 4.8) and Rouvillers (Van Ossel and Ouzoulias 2000, fig. 7, 146). This may be due to the practical issues with excavating material and constructing on uneven and disturbed ground or for more esoteric reasons such as a desire to be located away from ruined or semi-ruined buildings identified with the past, possibly related to the oral culture developing around ruined Roman sites (Leslie 1961, 22-30; Percival 1992).

This shift marks the beginning of a long-term trend in non-ecclesiastical rural wooden construction that only begins to slow down in the 7th century. It is represented by 31 sites, primarily spread across

northern and eastern *Germania Secunda* with a lesser distribution in *Belgica Secunda* and *Germania Prima*. The shift to post-built structures in the Late Roman period is primarily located in regions closer to the *limes*. Over 50% of sites demonstrating habitational change in *Germania Secunda* are represented by a shift in construction type and often in orientation. This trend increases closer to the Rhine with some sub-regions, such as the modern Southern Netherlands undergoing over 70% of habitational transformation in this style. The domination of *Germania Secunda* in this particular data group is show in figure 4.7. The influence of this architectural group lessens towards the west, with no sites adhering to this form in *Belgica Prima*.

The domination of northern and eastern sites in this data set suggests that much of *Germania Secunda* was under a hybrid architectural and cultural influence during Late Antiquity. It has been argued that much of the reoccupation of former villa settlements came from the 'Germanic' north and was both partially a conquest resisted by the Roman state and sanctioned settlement. This is most apparent in the region of Toxandria (Goetz 2002, 311-312) with a hybridised culture slowly spreading south throughout the 5th century, although this model has been significantly challenged (Theuws 2008). The presence of new forms of rural housing have been taken either as evidence for rural impoverishment (Van Ossel 2006) or for the presence of primarily Frankish groups in the Netherlands, Germany and Belgium in the late 4th and 5th centuries (Heeren 2017, 160). The data presented in this study does indicate an abrupt shift in house design, planning and construction in the 4th century across a wide selection of villa sites in the northern zones of the study region with many sites losing their original designs. The northern half of *Germania Secunda* had been effectively depopulated in the second half of the 3rd century with limited reoccupation from the first half of the 4th century onwards, increasing to a peak at the beginning of the 5th century.

New house designs are common at all of these sites. Three-aisled byre houses are present at a number of sites, including Neerharen-Rekem (figure 4.8) in many cases supplemented by sub-rectangular and difficult to categorise structural elements as well as the ubiquitous *Grubenhäuser*. The most important point to note is that these new building styles mark a radical break from earlier development towards timber constructions at transforming villa sites. A selected number of 3rd century sites experience transformational trajectories that include wooden constructions, for example at Hoogeloon-Kerkakkers (Hiddink 2014a; 2014b; 2014c), however these buildings are rooted in a traditional style, either in the form of Alphen-Ekeren or Oss-Ussen type houses. This disconnection between earlier forms of wooden construction and the later development of *Grubenhäuser* and Wijster-type longhouses is suggestive of two different traditions, completely divorced from one another. Not only does the appearance of new housing types suggest that new influences were at work, their spatial and temporal development also suggests that this style predominantly developed in the north and spread southwards (figures 4.9 and 4.10).

Within a spatial temporal view, there is general north-south spread of timber constructions. Early wooden construction appears initially in the first half of the 4th century. Appearance of these settlements begins first on marginal occupied landscapes in the northern zone of the province, for example at Kerkhove-Avelgem (Rogge 1981) and in relatively unproductive landscapes in Flanders and the poor sandy soils of parts of the German loess belt. This pattern is similar to developments with Anglo-Saxon migration to Britain, where evidence suggests that early immigration was focused on abandoned, marginal landscapes such as the Essex coast, demonstrated through the analysis of the Anglo-Saxon site at Mucking (Clark and Hamerow 1993). The second phase of wooden construction begins in the middle of the 4th century, spreading into larger areas of the loess belt and Picardy. The final phase of wooden construction appears in the late 4th and early 5th centuries and is marked by the widespread adoption of new building styles across the entirety of the region.

Fig. 4.8: Shifting patterns of habitational styles: the post-built settlement at Neerharen-Rekem, illustrating both the variety of architectural forms and the dispersed nature of the settlement (Dodd, after De Boe 1985, Fig. 4 and 8).

This spatial-temporal distribution is illustrated in figure 4.10 although in key areas - primarily along the Belgian loess zones and the western side of the *Via Belgica* - publication has been extremely poor and macro-analysis of the data is marred by poor recording. Figure 4.9 primarily represents the state of research across different sectors of the region. On an individual site level, the evidence is somewhat ambiguous. Wooden constructions appear spread across large areas of many sites, often spatially distanced from the former villa buildings, for example at Neerharen-Rekem (figure 4.8), HA412 and Voerendaal-Ten Hove (figure 4.9). This is, however, not the full picture. A range of sites do show an intense degree of interaction with former villa buildings. A range of sites, primarily in *Belgica Secunda* demonstrate a continuity of spatial placement, for example at Habay-Rulles and Hamblain-les-Pres, where wooden buildings were directly inserted onto the rubble platforms of 3rd century residential blocks. This suggests that we are dealing with two distinct traditions of wooden building construction, something further highlighted in the temporal and spatial spread of the phenomenon (figure 4.10; figure 4.11).

The dense nature of a number of these sites supports the assertion that new forms of habitation were divorced from their 3rd century predecessors. By the late 4th century, a number of these sites were

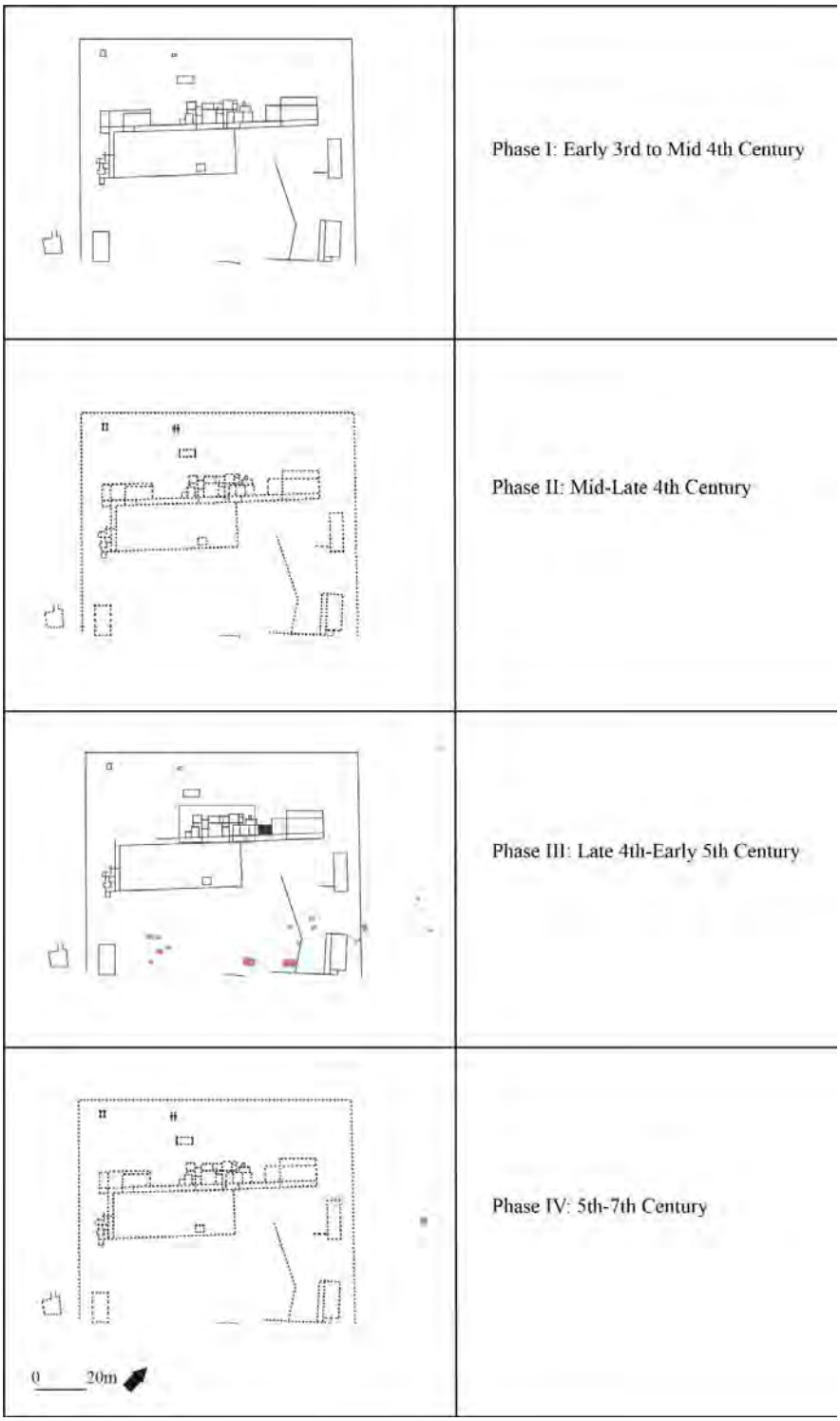

Fig. 4.9: Shifting patterns of habitational styles: the post-built settlement at Voerendaal-Ten Hove, illustrating the nature of the Late Antique and Early Medieval settlement on and around the (former) villa complex (Dodd, after Hiddink and Habermehl 2017, 96-98, 1C-1E).

exhibiting an economic power to rival Roman sites in the region, for example at Neerharen-Rekem (figure 4.8), where at least 25 SFBs and several byre houses of a northern type have been recovered. The increasing size and increasing quantity of material culture of these sites suggests that by the early 5th century, some socio-economic recovery was underway, with a level of socio-economic stratification evident,

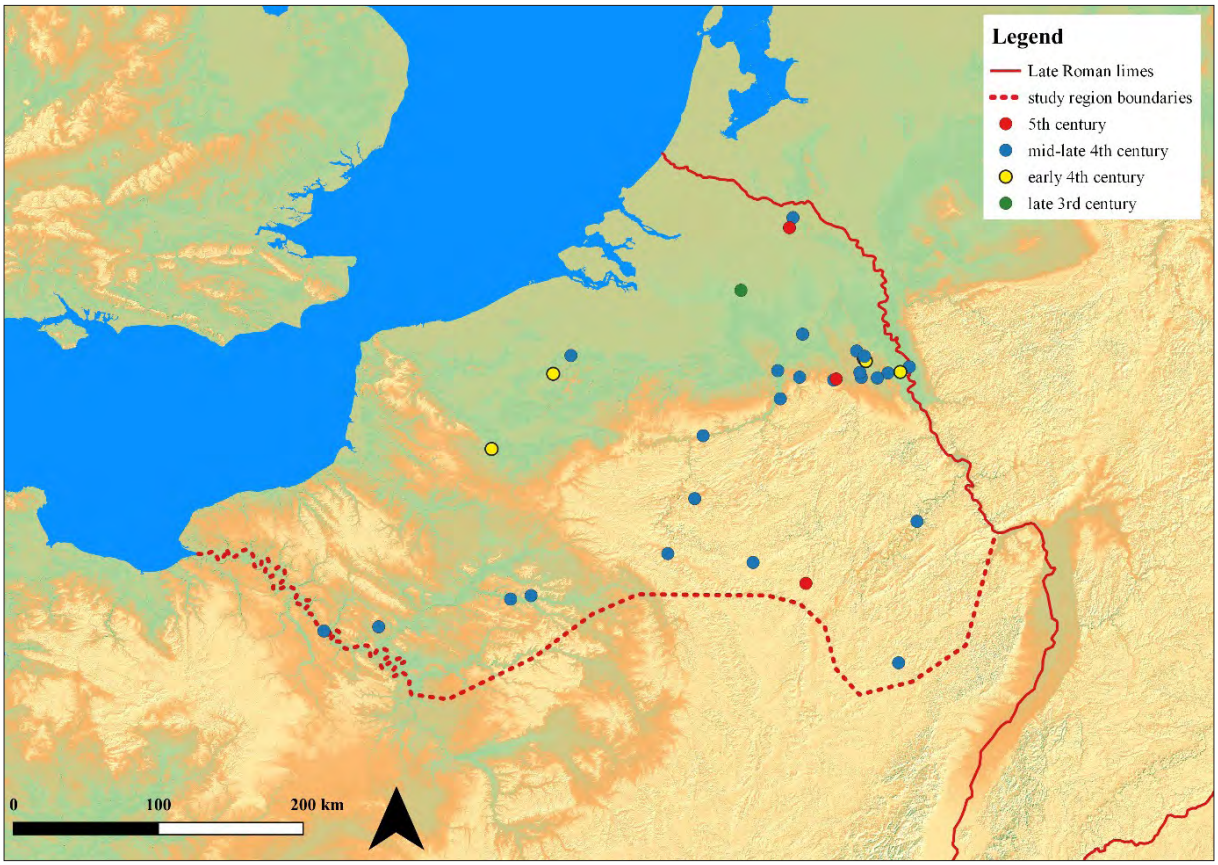

Fig. 4.10: Temporal spread of timber buildings on villa terrains where evidence is available during the Late Roman period in the northwestern provinces (J. Dodd).

with the work force and resources to construct and maintain large buildings. Marshalling these elements requires some level of social authority and represents the development of socially stratified populations into to region, representing a similar phenomenon to the 1st century development of the villa landscape (Willems 1981; Slofstra 1991). Labour was a key element to this. Material requirements for some of these buildings ensured that a local, likely subsistence economy was revived in parts of *Germania Secunda* to provide the resources for social stratification.

The gradual spread of *Grubenhäuser* and northern style three-aisled buildings from the north and east mirrors the repopulation of the region and the slow growth of a Frankish population in the area. Although this approach is somewhat problematic, the temporal data from villa settlements reinforces the narrative. Small numbers of sites are reoccupied throughout the 4th century, spreading from the north and east, although outliers are present. New timber building construction at (former) villa sites peak primarily in the late 4th and 5th century, at the same time as known population movements and within the period of *foederati* agreements with Frankish groups (*cf.* Heeren 2017, 164).

The 'Germanic' nature of these reoccupied sites is reinforced by the material evidence. 4th century and early 5th century ceramics and artefacts suggest that new populations were moving across the Rhine. Rhine-Weser pottery and 'Germanic'-style artefacts such as fibulae and combs are found at an increasing number of sites from the mid-4th century onwards, indicating an increasing population density of immigrants in the region. This is supported by other forms of ceramic evidence, notably the *terra nigra* form Chenet 342 and Gellep 273/274 (Chenet 1941, 91-92; Van Thienen *et al.* 2017) and transitional Alzei forms, both of which have been used to indicate an increasing hybridisation of material culture in

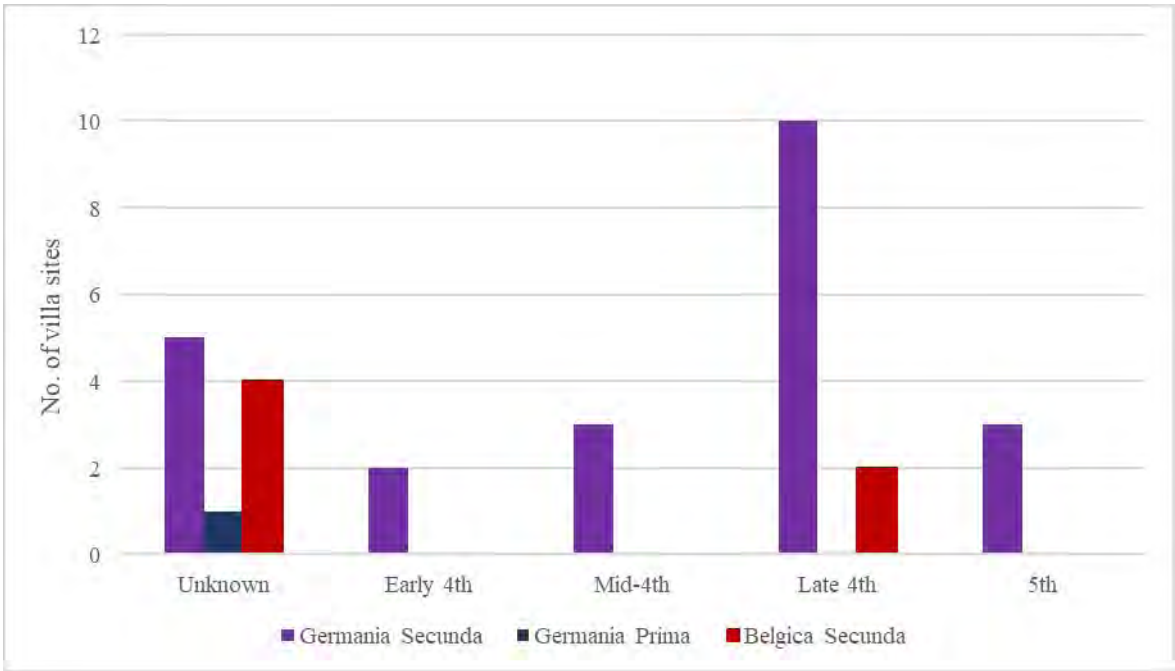

Fig. 4.11: Temporal breakdown of the appearance of wooden structures at villa sites (*n*=30) (J. Dodd).

Germania Secunda in the late 4th and early 5th centuries. Various combinations of these ceramic forms appear in or around new timber buildings on transforming villa sites in the second half of the 4th century, as well as playing a role at a wide range of abandoned and poorly recorded sites in the Dutch loess belt[10], although modern analysis of the material has not been undertaken. The presence of a wide range of material culture in broadly 'Germanic' styles at villa sites places these new hybridising settlements within the framework of migratory movement into the region. Whether or not this represents the slow migration of Frankish groups into the region and the loss of direct imperial control over the hinterland behind the frontier zone in the 4th and 5th centuries is debatable. New Frankish groups moving into the depopulated regions of *Germania Secunda* can be interpreted as political settlements with individual groups, negotiated by the Romans from a position of strength, something supported by the evidence for 4th century military operations in the region, for example, the campaigns of Constantine Chlorus (*Pan. Lat.* VIII, 5; De Boone 1954, 58) and Julian (*Amm. Marc.* 18.2.3). Equally, this can be viewed as a substantial loss of control that required repeated military interventions to stabilise the region. Whatever the case, the archaeology does point towards new groups, using 'Germanic' style material culture and housing styles settling in the region from the 4th century onwards.

The pattern of new styles of occupation at villa sites is key to the changing functions of villa complexes in Late Antiquity in *Germania* and *Belgica*. The abandonment of stone construction, combined with developing social hierarchies at some sites indicates that new populations, primarily from across the Rhine were present and developing an increasingly hybrid cultural style and an imposing reorganisations of the rural settlement landscape. This migration-driven narrative contrasts with the reuse and renovation of villa buildings in the southern zones of the study region. The morphological and spatial differences between this group and sites with newly built wooden structures present a dichotomy in the data set. It

[10] For example, the multiple sites in Holwerda and Goossens 1907; Remouchamps 1925; Peters 1922; Braat 1934; 1941.

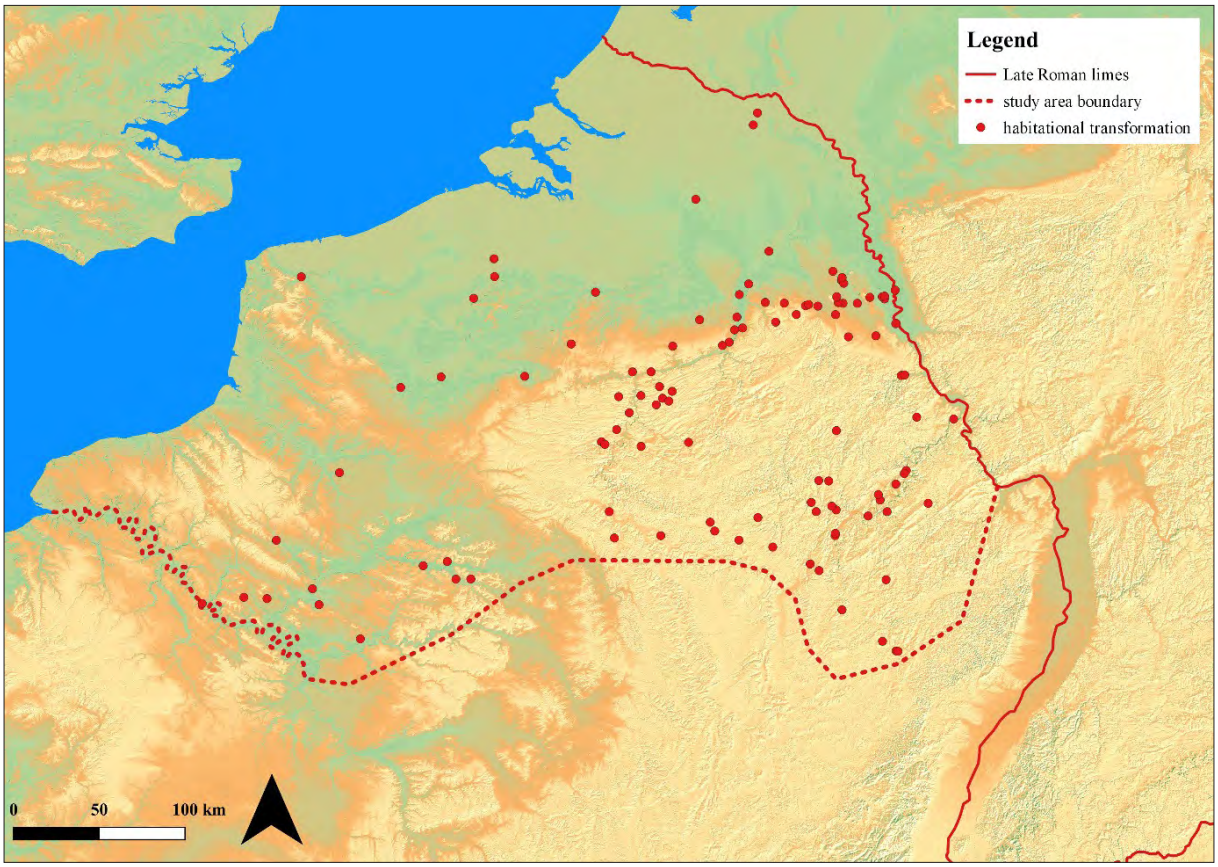

Fig. 4.12: The distribution of habitational transformation at villa sites in the northwestern provinces in the Late Roman Period (J. Dodd).

suggests that two competing traditions were at play; one embodying traditional forms of 'Roman' rural architecture and occupation, albeit economically less secure than their predecessors and likely attempting to maintain landholding patterns similar to the 3rd century. This sentimental occupation contrasts with the northern zones where there were no such qualms about occupying decaying Roman structures or building in new non-Roman styles on estate centres. This development dichotomy marks out two conflicting Late Antique traditions and marks out the boundary between traditionally 'Romanised' populations and immigrant hybridising populations in the 4th and 5th centuries.

4.4.2b DISTRIBUTION AND DENSITY

Spatially, habitational transformation is ubiquitous across the northwestern provinces, occurring in almost all geological zones and human landscapes, although the Late Antique density of villa sites displaying this class of transformation generally declines towards the north. This decline is observed in all classes of transformation and it represents the phenomenon of depopulation experienced in *Germania Secunda* north of the *Via Belgica* (figure 4.12). The *Via Belgica* marks the northern limit of continuous rural settlement in the 4th century, with only a scattering of rural sites of all types occupied into the 4th century (Heeren 2015, 279, Table 4) with the villas north of the Bavay-Cologne highway experiencing almost total abandonment. The *Via Belgica* was fortified to some extent along most of its length during the course of the 4th century (Brulet 2017, 41, fig. 2) and the road remained a conduit for the movement of resources and transfer of people until the end of the Roman period, acting as a security corridor for settlement in the region.

Several distinct distribution patterns are present in the data set, the majority of which superficially mirror the distribution patterns for other forms of transformation (figure 4.12). Other than the already highlighted density declines in the north, several clusters of sites can be identified in the Paris Basin, the Moselle Valley and a large linear group spread along the *Via Belgica*.

A dispersed pattern of habitational transformation is visible in the south and west of the region. A lower density of habitational change is visible in Picardy and to a lesser extent, the Pas-de-Calais. Partly this is related to an excavation bias; regional archaeology has long favoured small-scale exploratory excavation and aerial photography campaigns over large-scale individual site excavations (*cf.* the work of Agache; Reddé 2018). Historically, environmental factors also played a role, with many coastal or near-coastal villas abandoned in the 3rd century in Flanders and the Pas-de-Calais as the region suffered significantly from the Dunkirk II marine transgression (Behre 2007, 96-97 for the underlying geological data). Waterlogging made traditional forms of landscape exploitation difficult with salt exploitation declining and farmland inundated. In response to these environmental factors, a wide phase of abandonment at all classes of sites has been noted for both sides of the English Channel. Within this study region, this phase was particularly intense for the Menapian and Morinian coastal regions and it includes the likely abandonment of the region's admittedly few villa sites. Traditionally, environmental factors have been secondary in explanations of abandonment, with the barbarian incursion hypothesis taking centre stage. A range of sites on both sites of the channel have been assigned to destruction or abandonment by attested Saxon raiding in the region (Seebold 2003), although there is little or no evidence to suggest that this was the case in Flanders. Inland, other factors seem to influence settlement change with the rural economy diverging in *Belgica Secunda* from regions further east. Habitational transformation is present, especially in the Paris Basin; however, it appears in tandem with the continuity of other forms of nucleated settlement such as *agglomerations secondaires*.

A cluster of sites is located in the Late Roman provinces of *Belgica Prima* and *Germania Prima*. This relatively dispersed cluster is spread across the Moselle Valley and the more fertile areas of the Ardennes, the latter traditionally viewed as a non-villa landscape. The majority of the region's villas undergo transformation, with many altering their design and function completely. Typically, a sliding scale of habitational transformation begins earliest in smaller villas, starting in the 3rd century whilst larger villas survive without transformation or enter a transformational trajectory in the late 4th or early 5th centuries, for example at the large imperial villa at Konz-Pfarrkirche (Reusch 1969). The survival of larger sites to the detriment of minor villas is a pattern visible across other regions of the Western Empire. The pattern in the Moselle and Ardennes broadly mirrors occupation trajectories in *Hispania*, where larger 4th century sites increase in size and sophistication at the expense of smaller sites (Chavarría 2005, 69-70). This dichotomy in *Germania Prima* and *Belgica Prima* likely related to the influx of military officials, administrators, and bureaucrats in Trier as the city gained importance from the early 4th century onwards. The Moselle served as both a communication route and as a wealthy villa landscape, surrounding the imperial centre at Trier, where various emperors were based and from 318 until at least the 380s was the residence of the Praetorian Prefect of Gaul. Its late 4th century character has traditionally been based on Ausonius (*Mosella* 20-25), although this is typical Late Latin hyperbole (Ware 2017).

The largest concentration of sites is spread along the *Via Belgica*. The group, consisting of both productively and habitationally transforming sites, is dispersed both north and south of the highway and stretches from Cologne to the hinterland of Bavay. A dense Late Antique occupation pattern is visible between Cologne and Tongeren. West of the Maas valley, this density is lighter and very few sites are present in the hinterland of Bavay and Tournai. This wide group of sites contains a wide variety of transformation, from sites where habitational transformation is the primary vehicle for rural change to villas where it was not a large-scale phenomenon and appears to be a secondary form of change. Notably those sites where habitational change is secondary or plays a small role in site dynamics are located close to urban centres such as Cologne, for example at both Köln-Braunsfeld (Fremersdorf 1928) and Köln-Müngers-

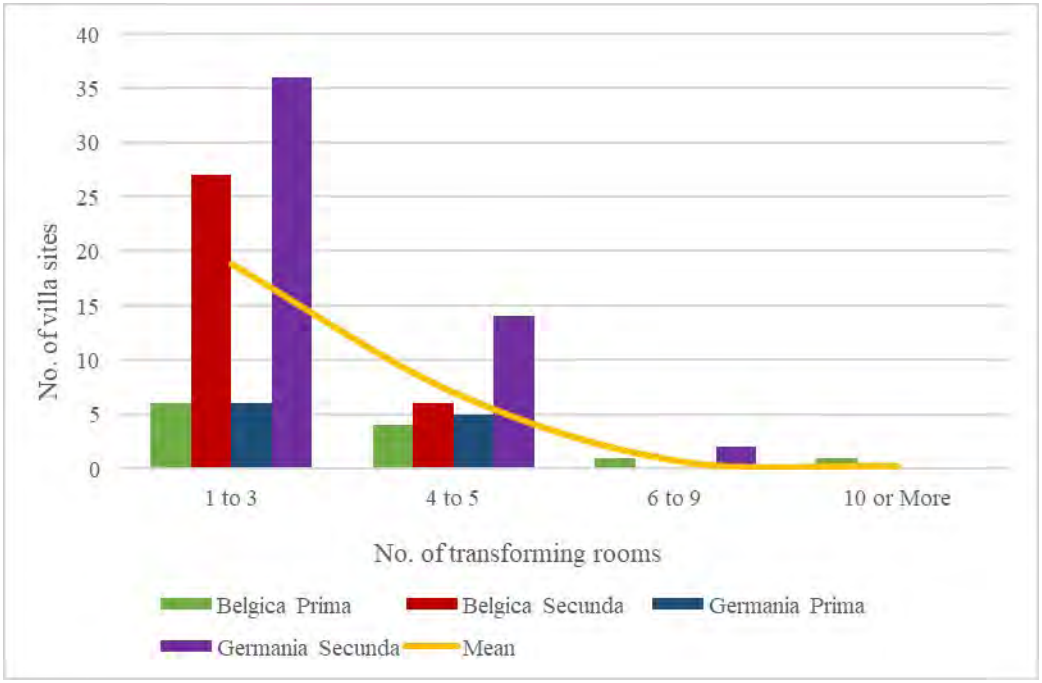

Fig. 4.13: Density of habitational transformation at individual villa sites by province measured by number of transforming rooms (n=108) (J. Dodd).

dorf (Fremersdorf 1933). This likely reflects a degree of continuity of socio-economic institutions in the region and the endurance of town-country dynamics into the 4th century around urban centres such as *CCAA*. Despite this, such low-level change at sites is relatively uncommon, with villa complexes abandoned in the hinterland of Cologne and structural elaborations discarded. The distribution of this cluster mirrors the distribution of military installations along the *Via Belgica*. Most transforming villas are less than a day's travel of a military installation or roadside *burgus* (Brulet 1995; 2017), with the military footprint instrumental in the presence of habitation at villa sites along the highway. The distribution of these sites suggests that habitational transformation in *Germania Secunda* was linked to proximity to the security corridor of the highway and linked to the perception of an unstable world.

Despite its regional ubiquity, there is a degree of variation in the character of habitational transformation with little uniformity in scale and size. Figure 4.13 demonstrates the overwhelmingly small-scale nature of the phenomenon; however, it highlights the regional and spatial variation in the data set. All four Late Roman provinces are dominated by small-scale reuse, reoccupation, or alteration. In most cases, this is limited to the use of several rooms or a single ancillary structure of a villa complex for habitational purposes with other buildings either abandoned, destroyed, or utilised within the sphere of productive transformation. Figure 4.13 illustrates this three-tier system of habitational occupation: firstly, the vast bulk of small-scale reuse, secondly, an intermediate tier of sites and thirdly, the very few large-scale sites. The top tier of large sites is small. The primary example of this comes from Echternach (Metzler, Zimmer, and Bakker 1981), a large axial villa in *Belgica Prima* with a complex stratigraphic history, several distinct phases of transformation and multiple forms of transformation. The sites show little or no evidence for luxury goods other than glass, although coin loss statistics tend to be higher, with a larger population footprint postulated. Between the vast number of small-scale sites and larger sites such as Echternach sits an intermediate level of sites. Occupation at these intermediate sites is more intense with a larger footprint and in some cases; the material culture is more sophisticated, with greater coin loss data and evidence of luxury elements, such as glass-use. Intermediate sites are primarily located in the eastern

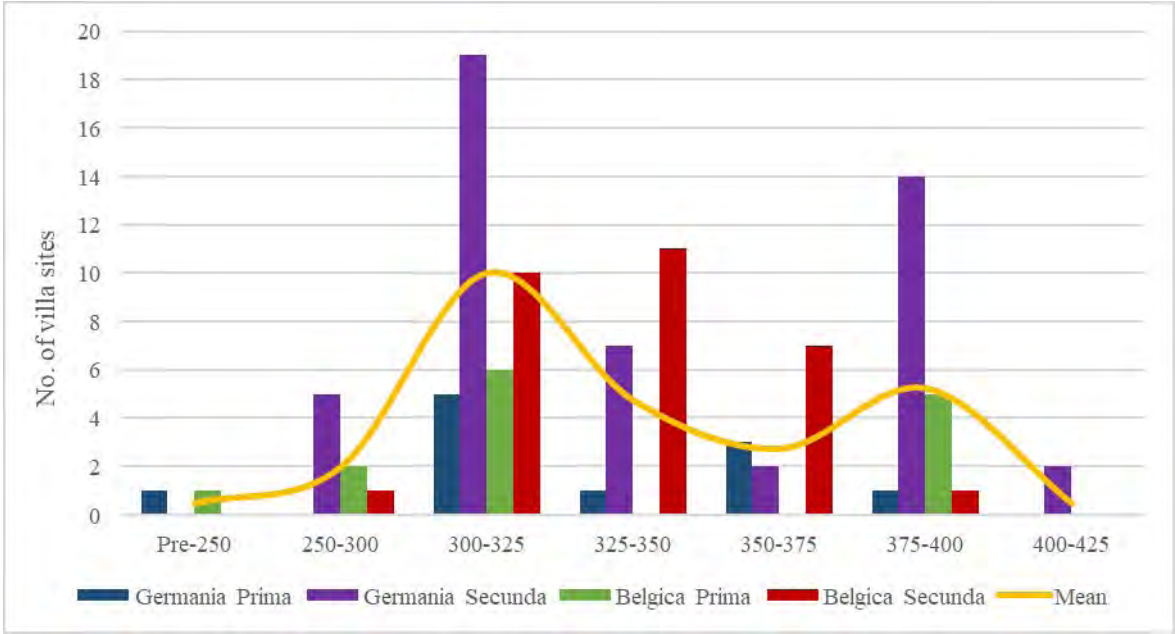

Fig. 4.14: First appearance dates for habitational transformation expressed as quantity of sites set against a regional average bar (*n*=104) (J. Dodd).

half of the study region, where traditional rural centres such as *agglomerations secondaires* declined in the aftermath of the 3rd century. It is likely that larger transformed sites played a role as social and economic nodes *in lieu* of the declining or militarised *agglomerations*.

4.4.2c TEMPORAL PATTERNS

Temporally, the pattern of first appearance is similar to general occupation distributions laid out in figure 4.5. Two major spikes in the appearance of habitational transformation are present. The first burst of activity dates the first half of the 4th century. Stylistically different patterns of occupation developed, especially in *Germania Secunda* (see figure 4.8). The reaction to the reorganisation of settlement dynamics at the end of the 3rd century is apparent in figure 4.14. Developments on transforming villa sites in the 4th century is driven by the spike of habitational transformation present in the early 4th century.

The second spike of activity dates the late 4th century. However, in certain regions, primarily *Belgica Secunda*, transformation had followed a different model, peaking in 325-350, likely relating to a *decision lag*[11] in the economy relating to the socio-economic problems of the late 3rd century. In the late 4th century, the fragile rural socio-economic consensus of the region begins to break down, with the majority of remaining sites undergoing some form of habitational transformation before the 5th century.

Notably a small group of sites experience transformation prior to the reorganisation and destruction of the villa landscape in the second half of the 3rd century. A number of these sites also have productive elements, in two cases related to the production of imitation coinage. The presence of habitational change in the early and middle 3rd century, especially when coupled with functional productive changes indicates that there were socio-economic problems occurring in the rural economy of *Germania Inferior*.

[11] Generally applied to central government reaction times in modern economics, see Hendershott 1966 for a discussion

Changing functions and less sophisticated occupation at sites reflect problems and support larger scale assertions that the economy had already entered a period of sustained decline before the second half of the 3rd century (Vos 2009, 89-99; Heeren 2009, 49-74).

4.4.2d DISCUSSION

Habitational transformation represents a key shift in the outward display of rural elites in the northwestern provinces. New occupation patterns developing the in north and east of the diocese are the most important points in this analysis. Although this shift to new timber-built structures does not account for the majority of transformation, 31% of sites in the region do show evidence of this, making it a statistically relevant element to habitational change at rural sites in Late Antiquity and the Early Middle Ages. The correlation between the construction of new timber structures and the presence of material associated with 'Germanic' immigration is relatively clear but not ubiquitous at transforming villa sites. The movement of people into the abandoned and marginal landscapes of *Germania Secunda* mirrors the immigrant trajectories of Anglo-Saxon groups into *Britannia* in the 5th century. The late 4th and 5th century repopulation of the northwestern provinces began in much the same way, with villa settlements on the fringes of cultivated landscapes reoccupied by immigrant groups.

The key interface in the region is the *Via Belgica*. Continued economic traffic between the urban centres along the road, coupled with the security of a military presence, encouraged reoccupation and continuity at villa sites in the corridor, although not necessarily in the same style. The presence of habitational change in this cluster is matched by an ongoing recovery of productive capacity in the region (see 4.4.3) and it is likely that military installations prompted local populations to initiate their own defensive projects, especially from the middle of the 4th century onwards (see 4.4.6). The linear highway, especially in its German section is the most important region to study changing habitational patterns in Late Antiquity. The appearance of post-built structures in the region from the mid-4th century onwards, typified by a break with traditional Alphen-Ekeren and Oss-Ussen building types, suggests a shift in design and planning of sites concurrent with new populations and new world views. Previous work suggesting that this is due to widespread rural impoverishment (Van Ossel 2006) does not completely fit the situation as the glass industries of the Hambacher Forst appear to enter a period of boom from the early 4th century onwards (see 4.4.3b.i), with the supply chains and transaction costs associated with creating an environment for relative prosperity. The choice of populations in this area not to put capital gains into landed assets suggests that a radically different societal structure was developing that eschewed norms of Roman social display.

4.4.3 PRODUCTIVE TRANSFORMATION

Productive transformation, such as the conversion of formerly high-status elements of a villa complex to industrial, agricultural or artisan purposes is common to a wide variety of Late Antique sites in the Germanic provinces and the Belgic hinterland with 73 sites demonstrating some form of productive change. A wide range of forms and classes of production have been noted, all of which play a role in the Late Roman rural economy of the region, despite the attested depopulation of much of the northern part of the region (Heeren 2015).

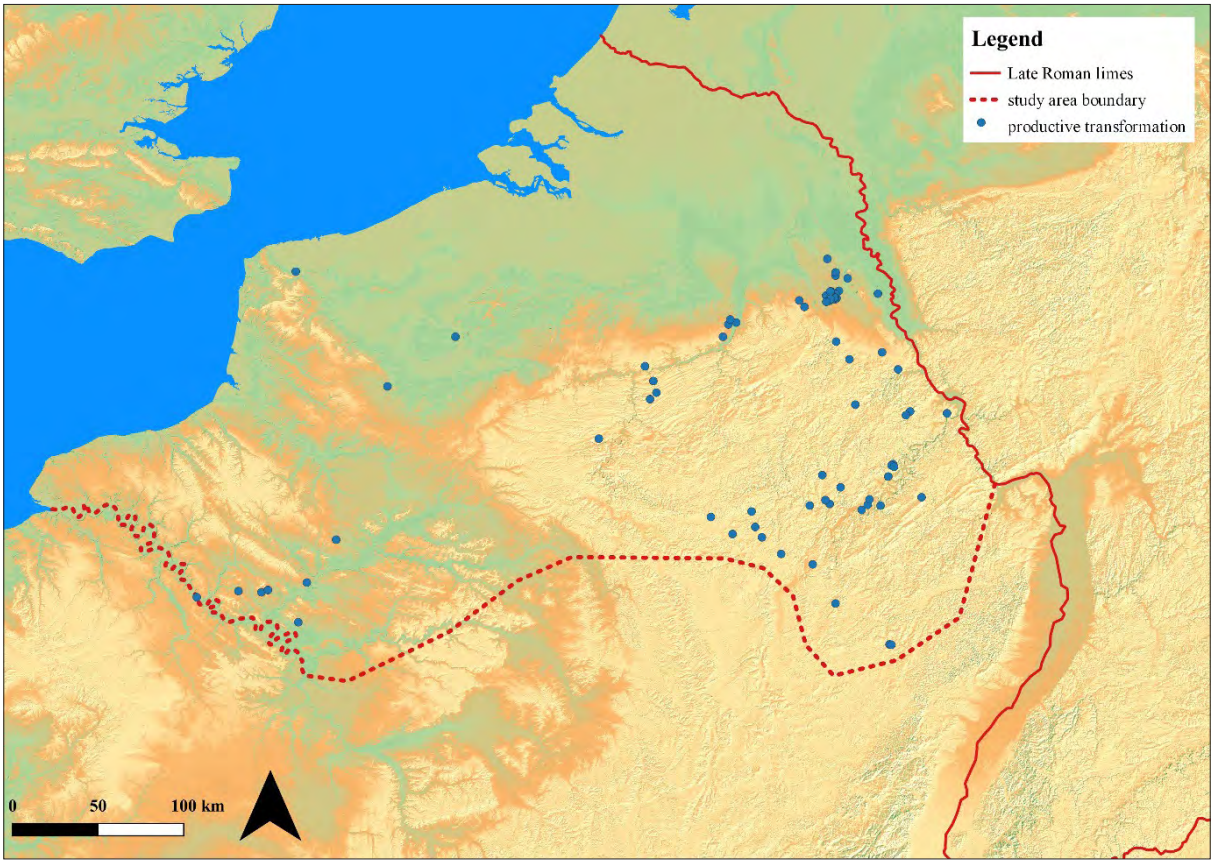

Fig. 4.15: Distribution of productive transformation at (former) villa sites in the Germanic and Belgic provinces (J. Dodd).

4.4.3A DISTRIBUTION AND DENSITY

Three major clusters can be noted: one in the hinterland of Cologne, a second more dispersed group in the Moselle Valley near Trier and a third group on the Lower Seine, within a short distance of several Late Roman centres, including Rouen and Paris (figure 4.15). Several smaller clusters are spread across the North Gallic loess belt, with one group situated on the Maas, close to Maastricht and a further group between Tongeren and Bavay. These lesser clusters are also grouped within range of both market centres and urban settlements. Some sites are present in Flanders and the Pas-de-Calais, where occupation did continue, however it suggests that the transforming villas in these regions were not an important focus for rural craft and industry and that production shifted elsewhere, perhaps towards military sites or urban centres.

The above distribution demonstrates several important elements of the Late Roman economy in the region. The distinct groups of rural sites in the loess belt and Cologne hinterland indicate the presence of a somewhat realigned economy for goods and services along the Cologne-Bavay axis. Their locations, close to urban centres and military fortifications suggests that the productive economy of certain areas was functioning in a similar way compared to the early 3rd century, when villas served urban centres and a town-country axis and demand-supply curve developed (Hodder and Millett 1980; Roymans and Derks 2011, 14-15). Some of this production was driven by the presence of the army, still the largest consumer of commodities, as had been the case in the Early Roman period (Roymans and Derks 2011, 17, fig. 4) and would be until the early 5th century.

Within the loess belt, there is a significant cluster of separate sites located in the *Rheinisches Braunkohlerevier.* This group of sites reflects the influence of environmental factors on Late Roman industry.

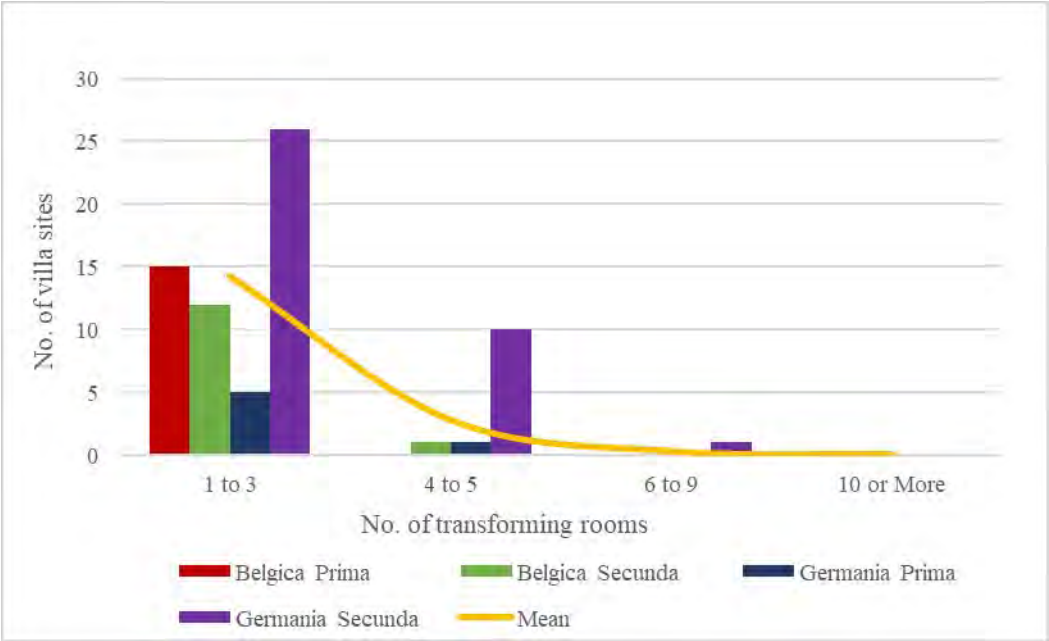

Fig. 4.16: Density of productive transformation at individual villa sites by province measured by number of transforming rooms (*n*=71) (J. Dodd).

The presence of sandy deposits in the region makes it perfect for glass manufacturing (Grünewald and Hartmann 2014, 46-47) and producers capitalised on this in Late Antiquity, with at least 20 glass ovens known from villa compounds alone in the Hambach concession (Grünewald and Hartmann 2014, 52-53). This regional industry will be further explored in section 4.4.3.b.iii.

Small-scale craft production is dominant at the majority of sites in all four Late Roman provinces. There is however, some variation, primarily in *Germania Secunda*, where a number of sites show evidence of more organised and larger productive capacity for example the metalworking facility at Ahrweiler-Silberberg (Fehr 1984). However, 60% of sites in this province are still small-scale in scope (figure 4.16). The small-scale trajectories of many of these sites indicates that production of finished goods and agricultural production was primarily directed towards a local market or for use of the site.

This development is partially driven by the decline of regional markets. Key intermediate settlements such as the nucleated *agglomerations secondaires* did not survive the second half of the 3rd century intact over most of the region, especially in the most disrupted parts of *Germania Secunda*. Many surviving nucleated settlements underwent a parallel trajectory of alteration and transformation into military or logistic hubs (Mertens 1990; Brulet 1995), for example at Liberchies or Tavier. Equally, other sites appear with *couches noire* ('black layers', a type of dark earth layer) in economic zones, for example at Bliesbruck-Reinheim (Van Ossel 1994 for a discussion of the evidence from Northern Gaul), suggesting a change of function.

The changing structure of market-based interaction forced a reorganisation of supply and demand patterns in the northwestern provinces. Luxury goods, iron objects and non-functional commodities no longer moved through market exchange at nucleated settlements into the hands of the villa-owning elite. This prompted the development of local or 'in-house' producers, perhaps specialists or semi-skilled labourers. Borg (Miron 1997; Birkenhagen 2011, 321) is a key example of this, with high quality metalworking and bone working undertaken in a former monumental gateway; however, the role of agricultural production in this is still poorly understood and will be explored more fully below.

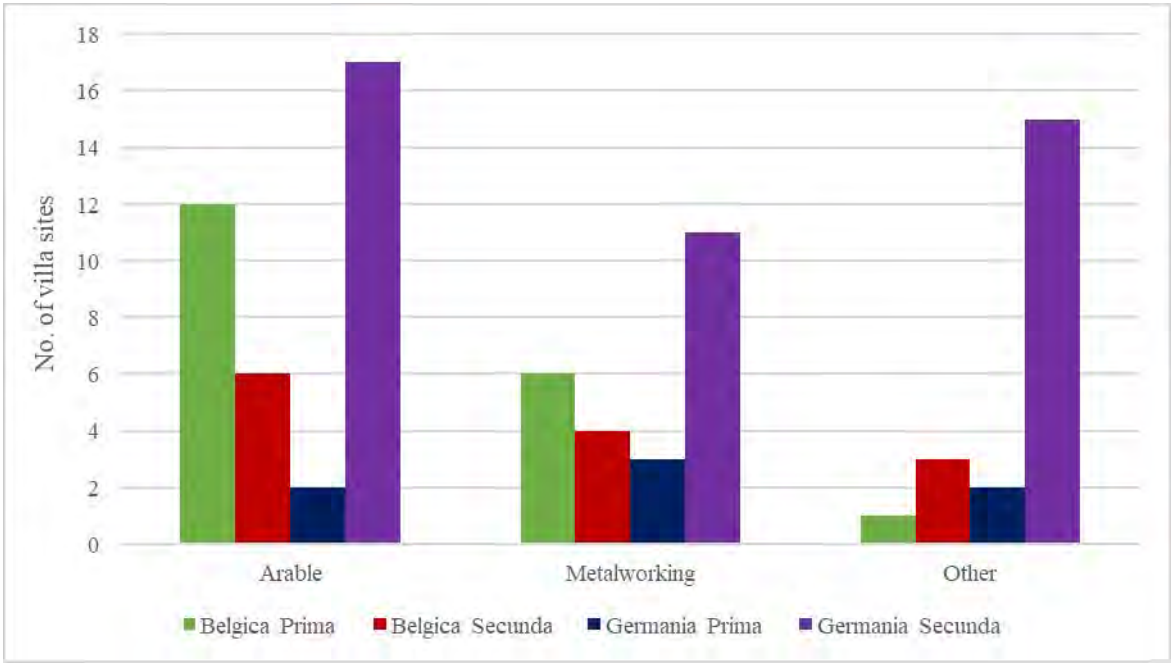

Fig. 4.17: A specification of productive activities at Late Antique villa sites by province and class of activity where data is available (*n*=82) (J. Dodd).

A breakdown of productive transformation by artisan and agrarian production shows just how broad development trends for individual sectors were during Late Antiquity (figure 4.17). Both metalworking and agricultural production were common across all provinces and roughly equally divided, whilst in *Germania Secunda* other forms of industry dominate, primarily due to the intense footprint of Late Antique glass production sites in the *Rheinisches Braunkohlerevier* (Wedepohl *et al.*, 2003).

Metal processing at (former) villa sites is visible across all four of the Late Roman provinces, with the larger sample of sites in *Germania Secunda* reflecting the larger size of the province rather than any statistically significant trend. Agricultural processing is the dominant activity present in *Belgica Prima*. Although agriculture is the primary activity for villa complexes throughout Roman history (Roymans and Derks 2011, 3-4), it is included with figure 4.17 to demonstrate the shifting nature of the activity in Late Antiquity. The evidence points towards new patterns of agricultural production that are not rooted in a tradition of surplus production and consumption and is suggestive of the end of the Middle Roman economic model; a topic further explored in section 4.4.3b.i. This illustrated by the downscaling and movement of arable production into formerly high-status structures, for example at Hambach 403 (Beyer *et al.* 1986), where a range of corn drying ovens were placed into the main building in the 4th century and Mayen, where parts of the main house were converted to storage purposes (Oelmann 1928). When arable production at sites is disregarded, the data demonstrates a shift towards metal processing across the four provinces under study. The uniform pattern to metalworking suggests that it was an economic and social priority for the Late Roman inhabitants of these sites, in many cases more important that the use and consolidation of agricultural facilities inside the main compounds of villa sites, except in certain regions of *Germania Secunda*, in particular, the glass production areas of the Hambach Forest.

Excluding the partially surveyed province of *Germania Prima*, agrarian production and processing is common to all regions, suggesting a significant continuity of market-orientated economic production into the Late Roman period. All regions demonstrate combinations of different forms of productive change. Unlike the situation in *Britannia*, where sites exclusively combine metalworking and agricultural processing, multiple combinations of artisanal activity in the Belgic hinterland and *Germania* are more

exotic. Combinations such as bone and horn working and metalworking are present, suggesting cottage industry production of finished goods at some sites, possibly for export.

4.4.3B THE RURAL ECONOMY

This section analyses the breakdown of individual economic activities in the region. This includes both rural crafts and industries such as metal processing and the agricultural economy before providing an economic approach to exchange in the Late Roman economy in the northwestern provinces.

4.4.3b.i The arable economy

a) The economic background

The agricultural economy of the northwestern provinces during Late Antiquity has been investigated intensively (Van Ossel 1992; Van Ossel 1996; Van Ossel and Ouzoulias 2000), although little or no large-scale quantification or data-driven processing has taken place. This has significant implications for modelling agricultural production and economic capacity. Very few studies have investigated the capacity of agricultural production in the Late Roman economy with the majority of existing studies concentrating on the Early and Middle Roman rural landscape (Brüggler *et al.* 2017). A sizable minority of these studies focuses on the more manageable non-villa landscapes of the Dutch Lower Rhine (Van Dinter *et al.* 2013; Kooistra *et al.* 2013). These works established that at its height in the late 2nd century, the Lower Rhine and the loess belt were able to produce a cereal surplus large enough to meet the requirements of the army on the Rhine (Van Dinter *et al.* 2013, 23-24; Brüggler and Jeneson 2017, 70; Reddé 2018). Despite this, the evidence suggests the rural economy may have been close to its carrying capacity (Heeren 2009, 90-93; Vos 2009, 70-74).

Agricultural production and economic capacity entered a sustained period of decline from the first half of the 3rd century onwards. Settlement size diminished with an assumed decline in the rural population and, by implication, productive capacity (for example in the Batavian *civitas*, Vos 2009, 74-77; Heeren 2009, 90-93, figure 38). Whilst this does not automatically equate to a lower level of surplus production; landscape exploitation may have shifted in favour of larger rural centres or relied more on slave labour; it does appear that production was in decline from the first half of the 3rd century onwards. The key break in capacity came with the depopulation of large sectors of *Germania Inferior* in the late 3rd century. The reorganisation of settlement dynamics in the region significantly disrupted the production and movement of resources. Simple analysis of the number of sites abandoned (figure 4.5) points towards an appreciable drop in net agricultural surpluses and economic capacity. This model demonstrates that production figures suffered from an average 55% decline in site occupation[12].

The widespread breakdown of the intensive, market-orientated villa landscape dislocated the military supply network and detrimentally affected the movement and collection of surplus resources in *Germania Secunda*. Reorganisation forced the military to contemplate the development of other supply patterns, for example *Britannia*, where it has been argued that the villa landscapes supplied the Rhine-Maas garrisons throughout the 4th century (Heeren 2018). Despite the widespread collapse of agricultural exploitation in the northern half of *Germania Secunda*, the Belgic provinces were initially hardly affected. Site density, and by implication, both site density and productive capacity remained relatively stable in *Belgica* (figure 4.3). This indicates that there was a continuity of both economic institutions and the continued redistri-

[12] The figures for abandonment have been extrapolated from average declines in occupation data from this study as well as those by Gechter and Kunow (1986) and Lenz (1999).

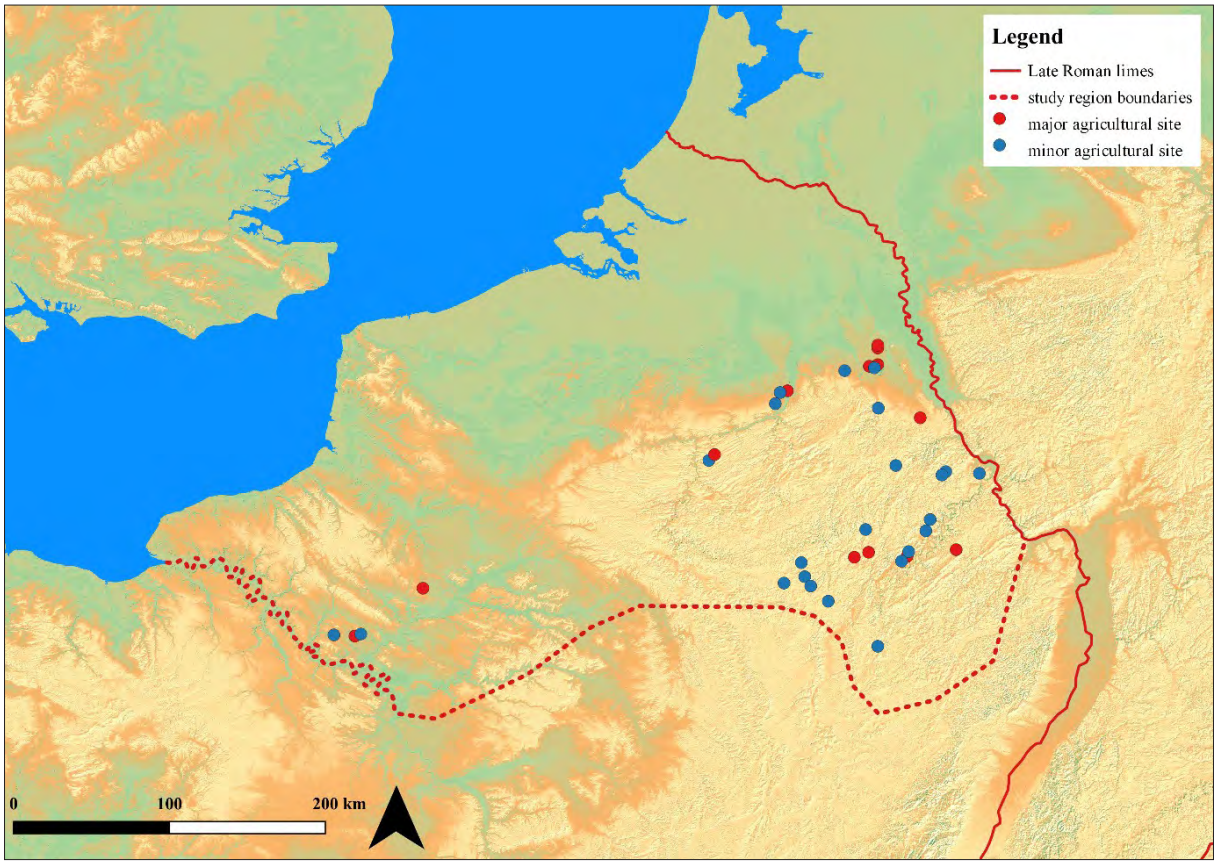

Fig. 4.18: A size-based breakdown of agriculturally active villas by scale of facilities present in the Late Roman period (J. Dodd).

bution of resources in the hinterland regions of the study area throughout the period of most disruption. *Belgica* and *Germania Prima* only began to experience the economic fallout caused by the depopulation of the northern parts of *Germania Secunda* and the reorganisation of institutions, exploitation patterns and the movement of resources in the early 4th century. The net result of this is a sharp increase of villas undergoing transformation in these two partially surveyed provinces (figure 4.5). Although there is significant evidence for continuity of production in some regions, it is undeniable that by the early 4th century regional agricultural output was significantly below the level of the Early Roman period.

b) Late Roman agricultural distribution and density

The widespread system of villa-based agricultural exploitation rapidly broke down in the late 3rd century, although there are regional differences in the scale and timing of this shift. The landscape was dominated by different patterns of production and consumption. The regional depopulation resulted in a less intensive level of occupation density. With the notable exception of the Moselle Valley, surviving sites have generally been considered to be producing at a subsistence level of agricultural production (Gechter and Kunow 1986), a theory borne out in the archaeological evidence, which is primarily domestic in nature. Surplus production was limited and the army on the Rhine was primarily supplied by British grain shipments[13]. Although the data set in this project roughly supports this, there is some regional and productive variation with certain regions demonstrating different patterns of agricultural exploitation. This

[13] *Amm. Marc.* 18.2.3; Wigg-Wolf 2014, 225-226; Heeren 2018, 143-144; section 3.4.3b.i for a critical analysis of the archaeological and historical underpinning of this.

data set includes 37 sites that experience a phase of productive transformation related to the agricultural economy (figure 4.18). This group of sites demonstrates all stages of the *chaîne opératoire* of agricultural production with evidence of processing and storage facilities.

The spatial distribution of agricultural change suggests that villa complexes in the northwestern provinces were not completely devoid of agricultural functions in the Late Roman period (figure 4.18), especially in the Moselle region, a topic further explored in section 4.4.3c. Instead, there is a de-intensification of agricultural exploitation and a shifting of patterns. Villa complexes in the German, Dutch and Belgian loess belt and Picardy no longer act as surplus producers with few surviving sites geared towards a high level of agricultural output. Three clusters of agricultural activity are present in the data set, consisting of a mix of larger and smaller producers. The first group is located in the Seine Valley and is likely connected to the long-term resilience of the villa landscape in central and western Gaul (*cf.* Peytremann 2003a, 2003b; Gandini 2008), although the lack of large-scale excavation of the Somme and Aisne valleys makes this somewhat difficult to conclude (*cf.* Agache 1966; 1975; Reddé 2018). The second group is located in the hinterland of Cologne. There are 8 sites spread across the German loess region with retained or reoccupied agricultural features. This is most likely explained by their proximity to the urban centre and markets at Cologne, which resulted in a constant aggregate demand for consumable commodities. The largest cluster of sites is a dispersed group in the Moselle Valley and southern Ardennes and reflects the economic demand from the large centre at Trier, an imperial, provincial and diocesan capital throughout the 4th century.

The sites in this data set show evidence of a degree of site differentiation. Agriculturally productive sites in this data set are two-tiered[14]: 60% are small-scale, consisting of single or double grain driers, ovens or small storage areas, for example at Winningen (Eiden 1976; 1982). The remaining group of sites shows evidence of large-scale processing and storage and clearly has the capacity to produce a surplus of bulk agricultural resources. These larger sites are characterised by batteries of productive structures or significant storage and drying space, for at example at HA21 (Rech 1980) and Weitersbach. This hints that, at some level, surplus production at individual sites may have been maintained in parts of *Germania Prima* and *Belgica* in Late Antiquity. Small-scale production was unlikely to have been able to satisfy anything other than localised demand and it may represent a subsistence level of production and consumption, with any surplus revenue directed to supporting the urban elite. This differentiation in size at agriculturally productive sites suggest that a mix of local and regional production was at play in the reorganised rural landscapes of the 4th century.

c) An Approach to Late Roman supply and demand

The evidence for different levels of agricultural productive capacity at villas in Late Antiquity suggests that regional variation plays a huge role. Although villas maintained relatively similar forms of technological exploitation compared to their 2nd century predecessors, utilising both grain driers and storage buildings, the only significant architectural change appears to be the centralisation of resources processing facilities, both of cereals and finished goods in the main buildings of estates. This is a shift paralleled in better studied processing facilities of 4th century *Britannia* (*cf.* Allen *et al.* 2017, Fig. 2.47, 60). The production and movement of resources requires a new approach to supply and demand in the Late Roman economy of the northwestern provinces.

An overall decline in total aggregate demand for agricultural resources in the northwest occurs through the late 3rd and 4th centuries. The urban population size decreased in the late 3rd century with

[14] Division established by the presence of productive features; sites with evidence of more than three separate features were considered to be 'major' agricultural sites.

most urban centres shrinking in size, for example at Tongeren, where a Late Roman defensive circuit encloses only a small proportion of the 2nd century town (Johnson 1983; Vanderhoeven 2017). Other urban centres such as Voorburg and Nijmegen were abandoned or almost completely depopulated (Bogaers 1972; 134-135; Van Enckevort and Thijssen 2005, 133; De Bruin 2019, 134-135). The majority of the *agglomerations secondaires* and nucleated rural centres declined in size with a loss of productive function (Polfer 2005, 99). Some experienced radical functional changes, for example the conversion Taviers, Liberchies and Givry to road-forts or were abandoned completely, for example at Kerkhove and Rossum. These changes reduced the demand for bulk agricultural commodities in the region and consequently the pressure placed on surviving villas to produce a surplus for sale. In conjunction with this, the military footprint appears to have been less concentrated. Garrisons on the Lower Rhine may have been reduced (Heeren 2016; Van der Meulen 2017) with smaller groups of forces distributed throughout the Belgic hinterland. This naturally shifted the focus for the military authorities and influenced the transport networks and the mobilisation and flow of resources into the Rhine corridor. From an economic perspective, these functional changes typified an overall decline in demand with bulk goods increasingly supplied over a short distance, possibly with the *territorium* of small forts supplying the needs of much of the garrison.

Functionally, the changes in economic patterns are typified by a decline in total consumer demand coupled with a postulated decline in regional *Long Run Aggregate Supply* (LRAS)[15]. Archaeologically, this is represented by an attested decline in supply from the mid-3rd century onwards. The contraction of supply, practically represented by the abandonment of the northern parts of *Germania Secunda*, probably culminated in a series of *supply shocks* in the late 3rd and early 4th centuries. These changes will have forced institutions, both public and private, to shift transport, supply and production patterns as regional supply contracted. The characteristics of this new economic landscape can be examined through a standard supply and demand equilibrium. A smaller regional supply output will have been able to support the same percentage of aggregate demand in the short-term, however, to what extent this was possible in the northwest provinces is currently unclear. However, agricultural supply in the northwestern provinces is not a closed model: institutional costs on the movement of resources (Commons 1931; Coarse 1984) and an outside source of production, in this case grain from *Britannia*, disrupted the new balance of the consumption cycle during the 4th century. Despite this, Late Antique production in the northwestern provinces did play a significant role in regional supply and demand outside the depopulated regions of *Germania Secunda*.

This is archaeologically supported by several threads of evidence. The construction of new military *horrea*, some of which appear to have Late Roman phases, in the urban centres and militarising small towns across the region (Dubouloz 2008) such as Tongeren and Bavay suggests that there was an institutional need for agricultural storage beyond the requirements of subsistence or semi-surplus farming. *Horrea* were central to the transportation and storage of agricultural resources across the northwestern provinces[16]. The patterns of *horrea* in the northwestern provinces suggest that they were provisioned in part by supplies coming from *Britannia* and were strategically placed to benefit from river-borne traffic on the Maas, specifically the British grain fleets (Heeren 2018). Despite this spatially compelling argument, there is evidence for granaries at sites located a significant distance from riverine supply networks, for example at Taviers, Tongeren and Givry. These sites are located some distance from navigable rivers, at which point the movement of resources becomes prohibitively expensive (*cf.* Jeneson 2011) compared to water transportation. Given the apparent lack of long-distance movement of resources in Late Antique *Belgica* and the Germanic provinces, it sug-

[15] Garín, Lester and Sims 2018, 519 for an overview of the Aggregate Supply (AS) models; Dutt 2006 for the underlying theory in a modern economy.

[16] see Rizos 2008 for a comparative infrastructure of Late Roman *horrea* on the Danube frontier

gests that the *horrea* and by implication, the army in the hinterland, were supplied by a different source than the British grain fleet and that provisioning in this region was underpinned by access to local productive capacity. The use of centralised military *horrea*, both at local roadside forts and militarised centres in the hinterland, is supported by the evidence from individual agriculturally productive sites. Relatively few sites display evidence for both storage and processing facilities. The majority of sites is focused on production and tied into a more elaborate economic system that includes the movement and storage of resources. Production at villa sites appears to become centralised from the early 4th century onwards in the villa complex rather than ancillary structures (for comparable evidence from *Britannia*, Allen *et al.* 2017, fig. 2.47, 60) with grain driers acting as the primary processing facility. These features generally consist of a T-shaped flue, a bowl-like stocking area and a drying floor (Morris 1979, 5), although several further variations have been noted (Allen *et al.* 2016, 56-57). Several other forms, including a broad category identified in the literature as 'malting ovens' also seem to have served as grain processing facilities. There is a long-running debate on the exact use of these features (*cf.* Reynolds and Langley 1979; Reynolds 1981; Van der Veen 1989; Monk and Kelleher 2005) although evidence now points towards grain driers having multiple uses. In respect to this study, grain driers or ovens appear at 26 rural sites and demonstrate a significant degree of productivity within the rural economy. Rural production patterns shift in the 4th century, this marks a significant change from both the Middle Roman economy of the Belgic and Germanic provinces and the market-based interaction of 4th century *Britannia* (see section 3.5.3iib). Discontinuity in the economic patterns in *Belgica* and the Germanic provinces illustrates the changed pattern of rural production and consumption. The Late Antique economy of the region experienced significantly different patterns from its earlier predecessors in Northwestern Europe.

A majority of sites is limited to processing facilities alone with little or no evidence of dedicated storage facilities in use in the Later Roman period. This new pattern of processing and collection represents a reorganised situation for the supply and demand of resources. The key issue is the lack of on-site storage facilities; either storage was conducted at separate locations on the estates or other forms of settlement provided storage facilities. The former is unlikely, although difficult to prove. The only area where widespread excavation could have uncovered storage facilities is the mining concessions in the German loess belt, although the available evidence suggests that this was not the case. Instead, it seems probable that resources were centrally stored by state agents prior to transport, perhaps at military installations, fortified towns or *burgi*.

Despite this generalised model of agricultural exploitation and supply networks, there is no uniform pattern across all regions. Both the Moselle Valley and the Paris Basin display different patterns, illustrated in figure 4.19. In both regions, agriculturally productive villas continue in use, along with an intermediate tier of functional *agglomerations secondaires*. In the case of the Paris Basin, this can be argued to be connected to patterns of rural change and production in Central Gaul (Gandini 2008), however the case of the Moselle Valley is less clear. The hierarchical system of rural sites survived the Middle Roman period physically intact, although there seems to have been a degree of functional economic change. The survival of the agricultural system in the Moselle Valley is partly vindicated in the *Mosella* (Ausonius *Mosella*, 318-340), which paints a picture of bucolic productivity in the region and may hold a grain of truth concerning the survival of Middle Roman patterns of exploitation in the Trier area. The continuity of rural structures in both the Moselle Valley and the Paris Basin suggests that these landscapes were able to produce some level of surplus in the 4th century. Such a conclusion on this is, however, somewhat hampered by our poor understanding of the transport networks and collection nodes of the Late Roman rural landscape. It seems likely that rural continuity in the Moselle region is related to the presence of a large consumer demand at the imperial capital of Trier. Consistent and stable demand will have stimulated supply, especially considering a likely influx of elites and their dependents following the elevation of Trier to a diocesan capital in 318, supporting a range of economic activities related to agricultural supply in the wider Moselle region.

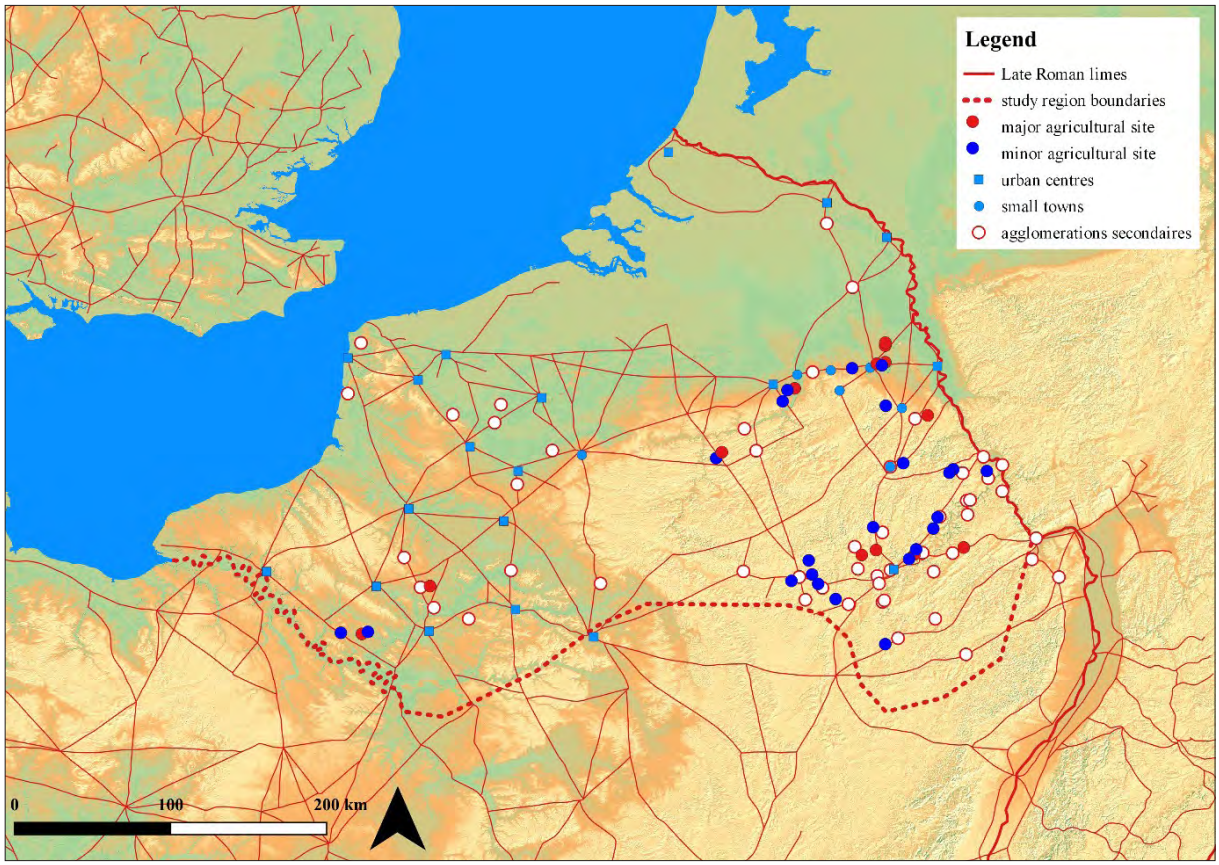

Fig. 4.19: Agriculturally productive transformation set against the mid-4th century urban and nucleated settlement pattern (J. Dodd).

4.4.3b.ii Rural craft and industry

a) Metal processing

Metal processing is a key facet of productive transformation at Roman villas across the northwest. Metalworking is a common theme to most rural settlements throughout the Roman period in the region, although larger-scale production tends to be located in the *agglomerations secondaires* (Polfer 2005, 32-35). Shifting patterns of smelting, smithing, and processing are apparent in the Later Roman period with metal processing at villa complexes increasing drastically from the late 3rd century onwards. This upswing in production is part of a wider flight of industry from semi-urban and nucleated settlements to rural sites and is more fully explored in section 4.4.3c.

Metal processing in *Belgica* and the Germanic provinces is divided into three broad categories; ferrous and non-ferrous production and a group of sites where evidence of multiple metal processing has been recovered (table 4.2).

province	ferrous	non-ferrous	both ferrous and non-ferrous
Belgica Prima	4	1	0
Belgica Secunda	4	0	1
Germania Prima	1	2	2
Germania Secunda	7	2	3

Table 4.2: Breakdown of villa sites by type of metalworking present where known (J. Dodd).

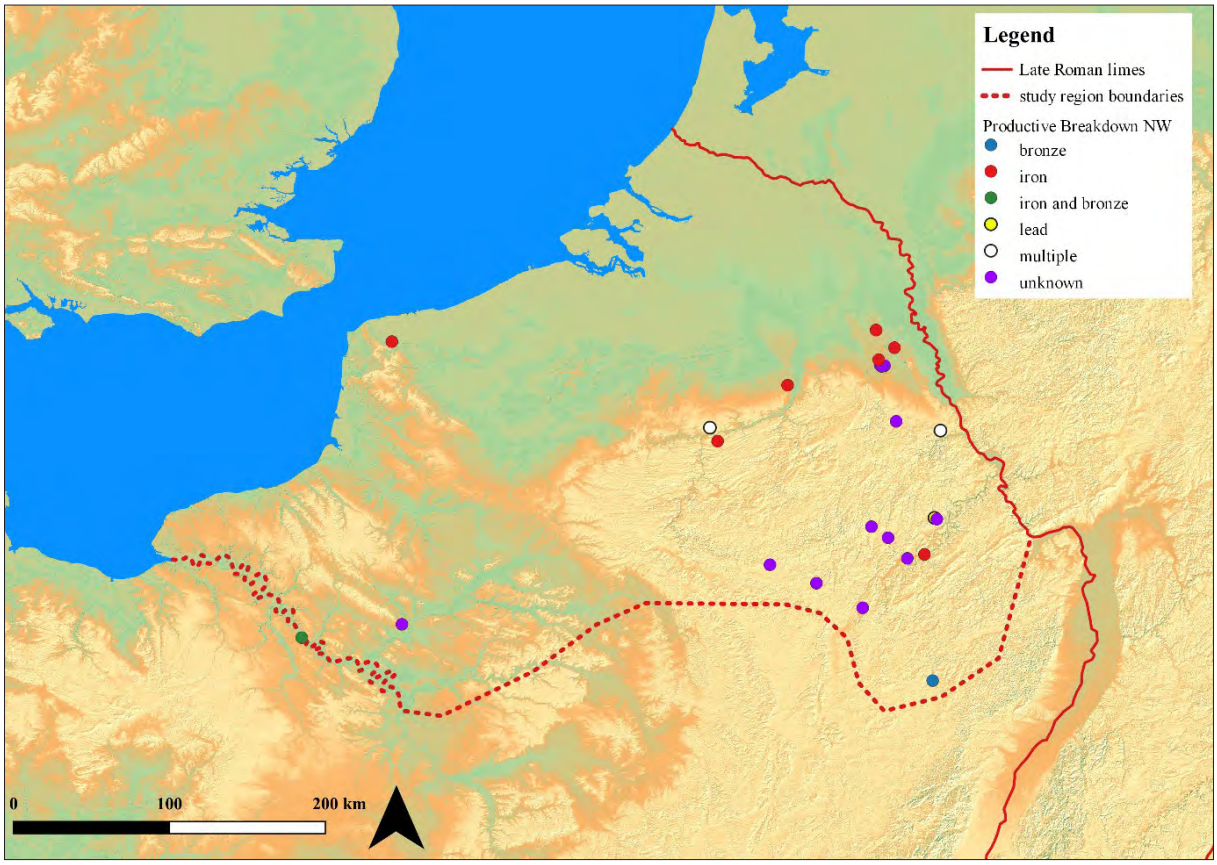

Fig. 4.20: Breakdown of metalworking transformation by processed metal type at villa sites in the northwestern provinces (J. Dodd).

Ferrous processing dominates metalworking output in all regions of the northwestern provinces. At least some of this production reflects high levels of demand for simple iron tools, for example agricultural equipment and construction or replacement materials such as nails or brackets. All stages of ferrous processing are represented, except the initial ore extraction with several examples of smelting noted, including a bespoke blast furnace excavated at Lixhe (Van Ossel 1983). The processes identified at villa complexes show that all levels of iron processing are present. This includes large-scale smelting for wider consumption as well as small-scale smithing likely to meet only the requirements of the individual site.

Several instances of metalworking are located in larger multi-faceted facilities. Production at a number of villa complexes, for example at Ahrweiler-Silberberg and Limetz-Villez, was geared towards the processing of several metals simultaneously. Multiple metal processing facilities requires both significant planning and investment and are not the product of local short-term supply-side arrangements (McDonnell 1995). Smelting and blasting are time-consuming processes, requiring a relatively specialised labour force and therefore are unlikely to have occurred on a small-scale basis (Schrüfer-Kolb 2004, 48). Primary phase production suggests that a supply chain for raw materials was still functioning in the northwest provinces in the 4th century and indicates that transformed villas were acting within a larger framework of metal supply and consumption. Relatively large amounts of charcoal and labour are needed to produce iron objects with a developed local supply network encompassing lumber quotas, labour requirements, and a substantial amount of time (*cf.* Crew 1991). Consequently, it cannot be said that the metal processing at villa sites was concerned only with the stripping, reworking, or repairing of objects and the smithing of essential tools. Instead, some sites were operating on a regional level with developed local supply networks and organised labour, likely with secondary activities such as reworking and recycling operating within this context.

A smaller proportion of sites comprise a group focused on the processing of non-ferrous metals. Both metals are relatively easy to produce, although bronze does require quantities of both tin and copper unless scavenging, repairing, and reworking was the focus for bronze processing. Evidence from two sites, Limetz-Villez and Sarreinsming-Grosswald, suggest that smelting was ongoing. This means that a reasonably developed supply chain was in place. Tin deposits were exploited in *Britannia*, *Armorica,* and *Iberia* as well as Silesia in the Late Roman period, and copper from a variety of similar source regions, although little or no work has been done to identify geochemical origin points for much of this material. Moulds were not recovered from either Limetz-Villez or Sarreinsming-Grosswald although given the presence of copper-alloy slags it is likely that some form of moulding was taking place (Polfer 2005, 74). Well-explored parallels from rural contexts in *Britannia* suggests that much of this rural production focused on brooches and small ornaments (Allen *et al*. 2017, 192, table 5.2). Sarreinsming-Grosswald is something of a unique example. Production shifted into the main house of the villa in the 2nd century AD and may be, in part, a reaction to a minor rural reorganisation in Alsace-Lorraine in the 2nd century. Industrial activity at Sarreinsming-Grosswald was able to benefit from the long-distance trading patterns in evidence during the Principate. Limetz-Villez is representative of a late 4th century trend towards artisan operations at villa complexes. The presence of copper-alloy production in the late 4th century suggests that there was a regional market for finished copper-alloy goods. Bronze is not an essential metal for small-scale farming or localised occupation and can be viewed as non-essential production. This production was likely catering to a wide regional demand for stylistic objects. Coincidently, there is some evidence that copper-alloy production at Limetz-Villez in the late 4th and 5th centuries is related to the production of 'Germanic' style fibulae (Böhme 1989). The production of finished objects such as fibulae and other ornaments indicates that productively transforming villas were able to react to fashion changes over the course of half a century.

An important sub-group of non-ferrous production deals with the processing of lead ores. Lead was a common component to hydraulic systems and water supplies in all Roman contexts and it had a number of other repair and component uses. Certain lead ores also contained a significant proportion of silver, extracted by cupellation (*cf.* Bayley and Eckstein 2006) although no evidence of this has yet been found in the northwestern provinces. Two sites in this database have been classified as lead processing facilities, at Bengel-Lindenstrasse (Binsfeld 1977) and Ahrweiler-Silberberg (Fehr 1984) with a third, Sarreinsming-Heidenkopf (Schaub and Hiller 1975), likely operating as a reworking site. Both facilities were used for both primary phase roasting and blasting as well as reworking, although the final output is currently unknown. With both primary and secondary production in operation and a lack of large-scale lead facilities in *agglomerations* and *vici*, it seems that lead production shifted from large-scale, possibly state or military organised production to small-scale regional production. This shift, beginning in the early 4th century also coincides with a drastic collapse in demand for lead for building projects in towns and cities and likely reflects changing patterns of demand in the northwestern provinces.

Villa-based metal processing in Late Antiquity is more than simple recycling, repair and reworking. A number of authors have approached metal processing as a simplistic cycle of reuse (Fleming 2012; Munro 2012), whilst Swift (2012) has argued for the reuse and recycling of individual objects, although this may be a British phenomenon only. Recycling had a part to play in the shifting patterns of metal processing in the 4th and 5th century countryside, however, this forms part of a wider shift in artisan output. The majority of Middle Roman light industry appears to have been concentrated on the poorly recorded and understood *agglomerations secondaires* (Van Ossel 1994, 263-281). The abandonment of the majority of nucleated centres coupled with the transformation or end of economic processes at surviving *agglomerations* in the late 3rd and 4th centuries initiated a shift in production away from population centres (Van Ossel, 1992; Polfer 2005, 99). *Belgica* and the Germanic provinces experience a downsizing of production and a wholesale shift of production from urban and semi-urban areas to rural settlements, crucially villa estates. The reorganisation of metalworking patterns in the rural economy can be tied to

changes in the nature of the long-distance movement of resources and changes in the structural level of demand in the economy. This is reflected in the new productive facets at a series of villas in the region. These new facets, catering to the local economy, are studded with large facilities capable of smelting and processing raw materials on a level above the requirement of local demand.

Temporally, metalworking at villa settlements enters a sharp decline in the early 5th century with little or no evidence at most sites for continuity of production into the Frankish period. Output shrinks substantially with more evidence for erratic production patterns. This is in line with the de-sophistication of mass production in the Early Medieval Period (Fleming 2012). This process coincides with the hybridisation of Frankish-Roman culture in the region and the spread of new styles of metalworking (Böhme 1989; Halsall 2007, 116-118). This reflects both the movement of 'Germanic' immigrants into the region (Heeren 2017) as well as suggesting that more developed and specialist light industry at sites produced larger amounts of metalwork and probably more specialised products were beginning to compete with other production sites. Various Migration Period cemeteries have demonstrated that certain forms of 'Germanic' brooch styles may have originated from similar or standard moulds and Halsall (1995) illustrated that a number of 5th century forms can be proved 'Germanic' in origin. The increasing nature of trans-riverine contacts and the strengthening of economic links across the Rhine, where alternative traditions of metalworking were present, demonstrates that settlements producing certain styles of metalwork may have been able to out-compete producers at villa complexes.

b) Coin-counterfeiting

Related to metal processing is the evidence for coin counterfeiting. Counterfeit coinage appears at regular intervals in Roman history (Gădzac and Gădzac 2001; Kropff 2005; see 2.9.2) and is generally characterised by poor execution and, in some cases, sub-standard use of base metals. In respect to this period, counterfeit coinage appears during the 3rd century and remains a background part of the exchange system until the 5th century. There are significant peaks of counterfeiting in the 260s-280s and 340s-360s, both prior to major coinage reforms (Reece 2006). Their presence has been tied to known bottlenecks in the supply of regular coinage (Wigg-Wolf 2016) with counterfeit coinage dominant in *Belgica* and the Germanic provinces in the late 3rd century (Kropff 2005, 86, fig. 4). Traditionally, the burst of late 3rd century copies has been seen as a reaction to the closure of the mint at Trier following the collapse of the Gallic Empire (Wigg-Wolf 2016, 227). They have been viewed in the context of *Notgeld*, or emergency money, making up for a bottleneck in supply, although this interpretation has been challenged (*cf.* Kropff 2005, 90).

Counterfeit production is poorly understood, with large numbers of circulating coins having been produced by a limited number of workshops[17]. Production is primarily located at villas but other sites, such as *agglomerations secondaires*, may have also had coin-counterfeiting workshops. The large quantities of locally produced copies cannot be explained by concepts of 'private production' alone. The sheer extent and scale of production hint that there was, at the very least, semi-official approval for these issues. Therefore, it has been assumed that large-scale counterfeiting mints are yet to be discovered. Two villa sites in this data set display evidence of counterfeiting activity; Hambach 56, where some kind of production occurred in the cellar in the 270s, minting Gallic Empire copies (Zedelius 1979) and Sarreinsming-Heidenkopf, which was producing *Tetrici* radiate copies between 270 and 280. Production and processing at both sites are individualistic. At HA56, production appear to have been concentrated on storage and stamping, although no dies have yet been published or recorded and apparently the raw material was smelted elsewhere and transported to the site whilst the whole process appears to have been compartmentalised room by room at Sarreinsming-Heidenkopf, with stamping and moulding undertaken.

[17] Not only confined to Northwest Gaul; for example, *Britannia*, Whitchurch (unpublished), Central Gaul, Autun/Epráve (Hill 1949, 5) and possibly elsewhere (Kropff 2005, 88-89).

The most notable aspect of transformation related to coin counterfeiting is that both sites began transformative trajectories prior to the destruction horizons of the 270s and 280s. With the long-term regional recession and coinage supplies increasingly scare, local authorities, in this case, the villa owning elite began to produce coinage to satisfy local demand for exchange mechanisms, perhaps utilising some of the labour laid off from the Trier mint in 274. Production at both sites seems to have been very intense with large sectors of both sites converted to production. This suggests that either the elite occupiers accepted a decline in occupation sophistication, or they were based elsewhere for the process. Unfortunately, little work has been done to establish the spread and scale of coins from these 'mini-mints' and much more work is required to ascertain the links between local landowners and counterfeit coinage.

c) Glass production

The development of the rural glass industry is an important element to the transformative process in parts of *Germania Secunda*. Glass production concentrates in a small zone between Jülich and Cologne, close to the *Via Belgica*. It is primarily confined to the well-excavated areas in the *Rheinisches Braunkohlerevier*. Both regions are comprised primarily of eroded loess soils suitable for glass manufacturing. Diagnostically, glass manufacturing has been identified through finds of glass ovens with rare material finds of waste (Van Ossel 1992, 153; *cf.* Price 2003, 81). Studies of glass production are not common and tend to be biased towards the Mediterranean and the eastern provinces, although in recent years investigation has begun to focus on developments in the periphery and rural production (cf. Price 2003; Smith 2017, 199-200). Glass manufacturing tends to be divided into two processes: primary production, in which lime, sand and soda are mixed to create glass and secondary production, where existing glass was reheated and reworked into new shapes.

Rural glass manufacture in the northwestern provinces is characterised by very small-scale processing with single or small groups of ovens spread across abandoned villa compounds, often in the shells of structures abandoned in the late 3rd century. The only large workshop comes from Hambach 132 (Brüggler 2009, 226-227), where at least 6 furnaces were recovered, as well as a small graveyard of late 4th and 5th century individuals, assumed to have been associated with the glass site. Diagnostic finds for many of these sites have been poorly published and identification has typically rested on architectural elements (for example HA77, Rech 1979) with only a few crucibles and moulds recovered (Gaitzsch 1999, 135-136).

The Hambach group of sites begins production in the early to mid-4th century whilst a second smaller group of sites in the Eifel enters production at the end of the 3rd century. In a number of cases, glass and metalworking appear to have been conducted simultaneously (Luik 1999, 215). The Hambach group, along with a number of ovens not located on former villa terrain, was well situated for glass production, with evidence suggesting that the increasing woodland was utilised by the industry (Fischer *et al.* 2005, 309-313). This reached a peak of intensity in the late 4th and early 5th centuries, with glass production shifting to other sites by the early Merovingian period (Grünewald and Hartmann 2014, 49, Fig. 6.8). Recent geo-chemical research has established that these sites were processing a mix of 'Roman' glass and a form of Late Antique glass called HIMT[18]. HIMT has been used to justify local glass manufacture (Follmann-Schultz *et al.* 2000, 104), although there are some challenges to this argument (*cf.* Grünewald and Hartmann 2014, 47). In terms of production, the evidence from the Hambach group is not clear; crucibles recovered from HA132 and HA488 demonstrate the required heating for primary production (Brüggler and Daszkiewicz 2004, 806), although there is little or no direct evidence for raw processing. Secondary processing was likely, and it seems that a combination of both raw processing and secondary repurposing was undertaken by this group of sites.

[18] HIMT (High Iron, Manganese and Titanium) is the primary distinguisher between Mediterranean glass production and production in the northwestern provinces (Grünewald and Hartmann 2014, 44).

The rise of the Hambach industry in Late Antiquity forms part of a larger flight of rural craft and industry from centralised locations such as *agglomerations secondaires* towards small-scale rural production (for glass production, see Grünewald and Hartmann 2014, 45-46, Figs. 6.3 and 6.4). This shift in production has been tied to the appearance of new forms and compositions such as HIMT although this is difficult to prove (*cf.* Grünewald and Hartmann 2014, 47). The collapse of intensive agricultural exploitation in the German loess belt freed up capacity and land for other crafts at the same time that *agglomerations secondaires* had begun to enter a period of decline. Glass manufacture itself was highly determined by the proximity of timber resources and transfer costs. The Hambach group was ideally located to exploit both the developing woodland of the loess belt as well as the presence of the *Via Belgica* for transportation. Glass workshops appear to be located on economic grounds alone. Artisan producers were reacting to demand from the urban and rural elites in Northwestern Europe as local production at *agglomerations secondaires* such as Liberchies entered decline and long-distance trading from more developed industries elsewhere ceased. The repeated presence of glass ovens and production waste in small zones indicates the development of a regional industry, primed by both local environmental circumstances and taking advantage of low input and transfer costs without a significant social or institutional cost.

4.4.3c DISCUSSION – A MODEL FOR THE LATE ROMAN REGIONAL ECONOMY

The Late Roman rural economy displays a radically different cycle of production and consumption in the northwestern provinces. Direction, scale and focus shifted between the middle of the 3rd century and the 4th century with few surviving Middle Roman economic patterns. Although villas still played a role in the production of agricultural resources, their predominance over regional output was broken and villa complexes were reduced to supplying local demand and sub-regional zones in the hinterland of the province. This generally took the form of supplying areas far from easy transport routes, for example, along the central sections of the *Via Belgica* or acting as secondary sources of production in regions where the surplus was produced elsewhere, for example in the hinterland of Cologne or the Moselle Valley. Late Antique villas comprise a small part of agricultural output from Belgic and Germanic provinces with farmsteads and other forms of rural settlement producing a larger part of the regional economic output. Effectively the depopulation of agricultural settlements in the loess belt negated the ability of the region to continue to produce output for the supply of the army, despite an overall decrease in civil and military demand. Instead, the army, forced to look at different supply patterns, sidelined the Germanic provinces and *Belgica* in favour of the booming villa landscapes of southern *Britannia* as a source of military supply.

The transformed villa landscapes responded to this shift in agricultural supply and transportation networks in several distinct ways. From the late 3rd century onwards, there is a significant level of economic diversification and specialisation. This process altered the physical fabric and socio-economic basis for some villa complexes. Simple surplus agricultural production by both altered functional complexes and reoccupied villas is uncommon with only a few villas, primarily in the Moselle region where older agricultural patterns remained, producing surplus bulk agricultural goods. The majority of economic activity at villa complexes in Late Antiquity is either agricultural in nature, especially in the Moselle Valley, or can be described either under the umbrella of 'light industry' and consisting of a mix of artisanal activities. In terms of the second of these activities, the evidence is representative of a general scaling-down of rural craft and industry towards small-scale cottage manufacturing in tandem with the de-intensification of agricultural production. Despite this, some sites and their associated artisan activities were acting on a scale beyond small-scale production and consumption. The movement of rural industry from the declining or abandoned *agglomerations secondaire*s, where Middle Roman rural light industry was primarily located, benefited small-scale rural producers by freeing up both capacity and increasing competition within the economy. This allowed local and regional supply to replace longer distance networks.

The new rural economy was dominated by overwhelmingly localised production and processing centres and the low intensity movement of resources over longer distances. Only a few zones, for example the Moselle Valley, where elements of the 3rd century economic pattern were maintained and the Hambach glass workshops, where a powerful regional industry on the Aldenhoven Plateau developed, transcend the trend towards localisation. The majority of rural settlement was no longer geared towards surplus production for the garrison on the Rhine. This development saw economic diversification increase, likely in response to the decline of economic production at *agglomerations secondaires*. The patterns of this shift are far from fully understood and much more work, encompassing other types of settlement is required to establish wider patterns of rural change. Agricultural exploitation and by implication, output, declined over the 4th century as rural craft production increased. Some level of agricultural exploitation continued at many sites, especially south of the *Via Belgica*, where levels of demand and supply for bulk agricultural goods continued. However, villa complexes had shifted away from large-scale agricultural production in favour of a wide range of smaller light industrial activities, taking up much of the slack from declining or abandoned *agglomerations secondaires* in the radically different rural economy of the 4th century.

This economic model fits into the Mankiw, Romer and Weil version of the Solow–Swan model[19], a vehicle for modelling long-term economic change by simulating capital accumulation, labour or population growth and increases in productivity. This model creates a formula where there is no requirement for equal balance between the four elements, allowing for the regional variation present in the Late Roman economy, specifically in the Paris Basin and Moselle Valley. The institutional costs of crossing provincial boundaries and transfer costs mean that there is no absolute convergence of economic growth or decline but rather social costs and benefits. The presence or lack of continued urban demand upset the equilibrium despite relatively similar patterns of production on individual sites and equalised local networks of supply and demand.

4.4.4 FUNERARY TRANSFORMATION

Funerary transformation, simply the reuse of villa sites for burial activity, is less common than other forms of change at rural sites. It is generally confined to secondary phase activity on villa terrain. A selection of 39 sites in the northwestern provinces demonstrate evidence of transformation for funerary purposes: this ranges from single individuals to large developed cemeteries. This group of funerary sites includes both burials in a 'Roman' tradition and 'Germanic'-style graves.

4.4.4A TEMPORAL AND SPATIAL PATTERNS

The sub-set of funerary transformation within this data set displays significant variation in both temporal spread and spatial morphology. Funerary transformation appears from the middle of the 3rd century onwards with an increase in activity in the early post-Roman period. This temporal diversity is illustrated in figure 4.21 and it demonstrates the widespread nature of the phenomenon in the Early Medieval Period. With the majority of reutilisation present occurring at the interface between Late Antiquity and the Early Middle Ages rather than in the 3rd century, the region invites comparisons with *Britannia*, where a similar temporal pattern is observed.

[19] Swan 1956; Mankiw, Romer, and Weil 1992 for the underlying mathematics and microeconomic theory.

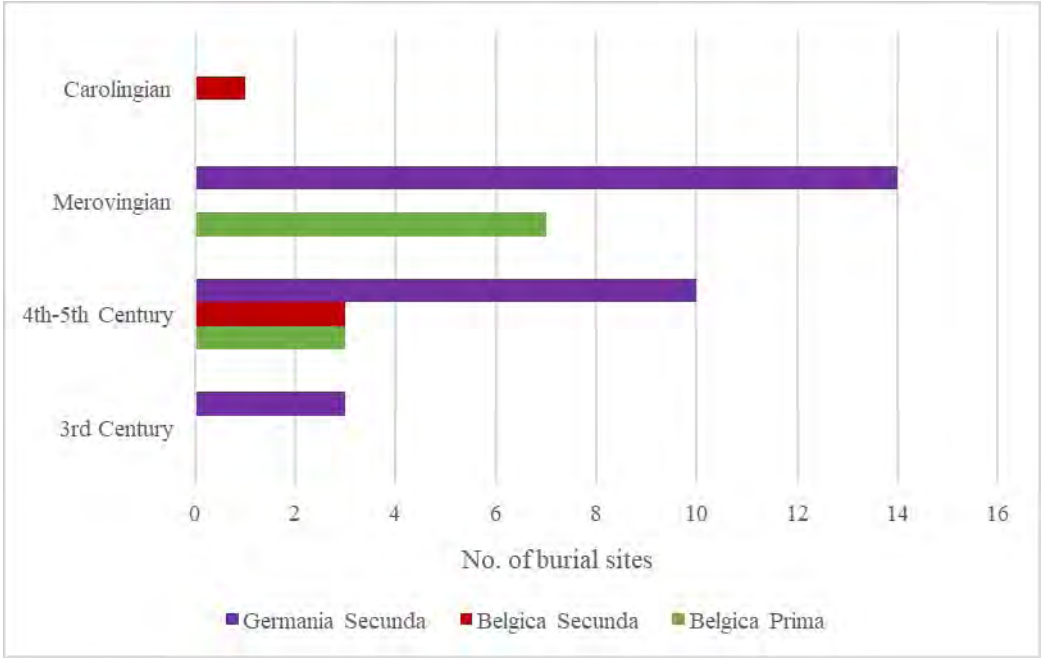

Fig. 4.21: Temporal breakdown of the number of villas or former villas demonstrating funerary transformation by Late Roman Province (*n*=40) (J. Dodd).

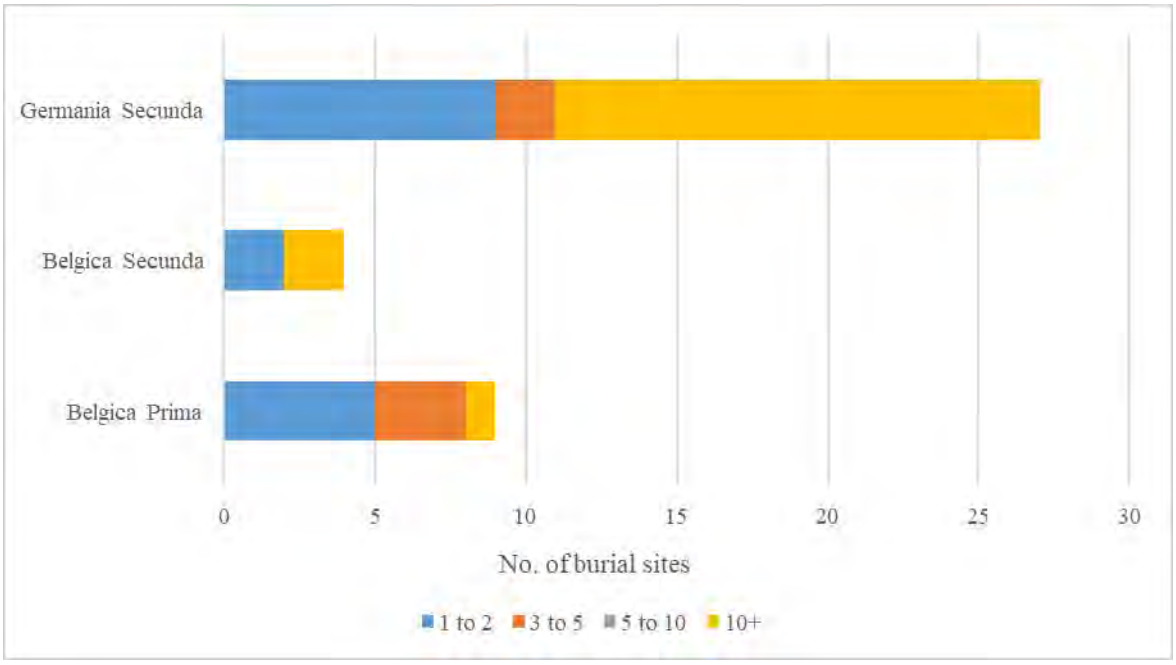

Fig. 4.22: A breakdown of funerary reuse at villa sites by number of individuals recovered where data is available (*n*=40) (J. Dodd).

In terms of cemetery size, funerary transformation tends to be focused on either very large or very small burial groups (figure 4.22). Very large cemeteries, generally temporally confined to the Merovingian period and in some cases numbering in the hundreds of individuals, were located over large sectors of the villa terrain often without respect for older structures, for example at Rosmeer-Diepestraat and a number of sites on the Aldenhoven Plateau (figure 4.23). This is contrasted with smaller-scale funerary evidence, in which individual burials tend to either be placed into specific parts of Roman buildings or away from structures completely.

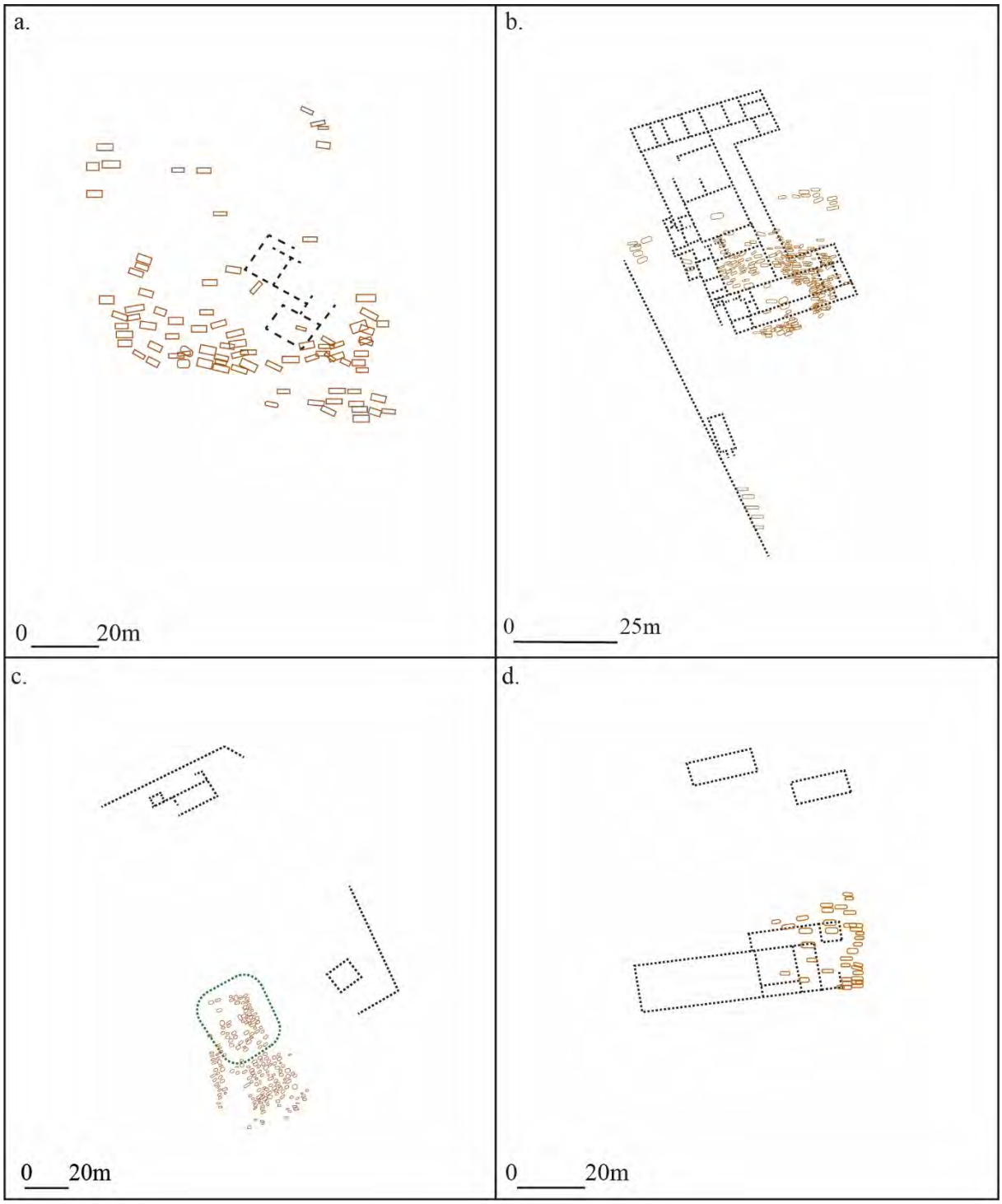

Fig. 4.23: Comparative examples of large-scale migration period cemeteries at villa sites in the study region: a. Rosmeer-Diepestraat (adapted after De Boe and Van Impe 1979, 44, Pl. 1), b. Eschweiler-Lürken-Laurenzberg 'Alte Burg' (adapted after Piepers 1981, 28. Abb. 7), c. Hambach 224 (adapted after Beyer and Jürgens 1995, 517, Abb. 21), d. Erps-Kwerps (adapted after Verbeeck 1995, 158, 158, Abb. 2 and 5).

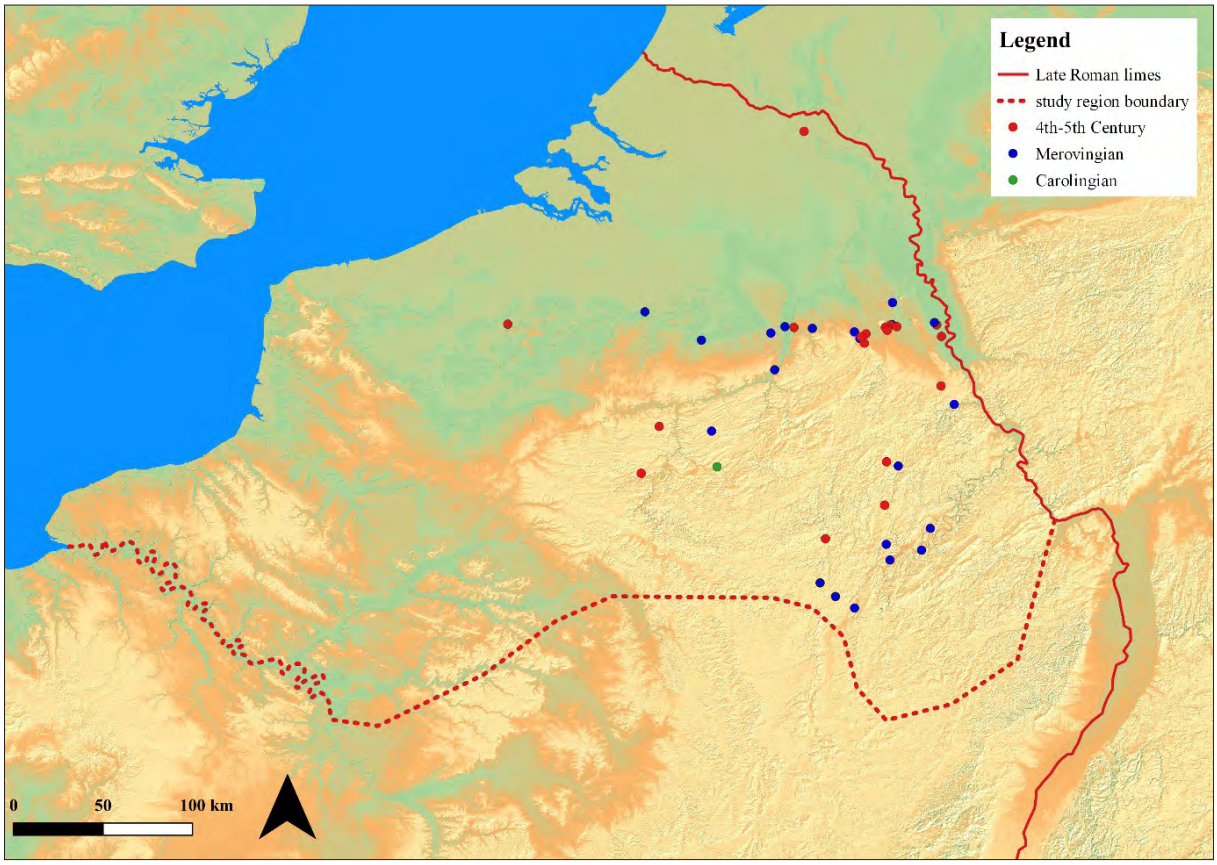

Fig. 4.24: A temporal and spatial breakdown of funerary transformation at villa sites in the northwestern provinces (J. Dodd).

Almost half of all surveyed sites (48%) are cemeteries consisting of burial groups of at least 10 individuals whilst 41% of sites consist of small-scale use, primarily of single or double inhumations. In between these two large data groups sits the remaining 11% of sites. This intermediate group consists of sites with 3 to 5 burials and is statistically irrelevant with examples equally spread through all periods. The three-tier structure of funerary reuse at villa sites is generally temporally continuous with smaller activities occurring earlier and larger activity developing later, although this is something of a generalisation.

Within *Belgica* and the Germanic provinces, the relationship between temporal distribution and cemetery size is broadly reflected in the stylistic and cultural-historic analysis of individual graves and their associated artefacts. Generally, sites with single or small numbers of individuals tend to have few or no grave goods with little or no grave structures. In some cases, this extends even to the lack of a formal grave, for example at Schwirzheim. This group of sites has generally been characterised as 'Roman' in origin, fitting into the Late Antique inhumation tradition with few or no grave goods (Theuws 2009, 295-286), although the lack of chronological indicators makes them difficult to date (Percival 1976, 183-199). A number of individual burials are important and richly furnished. This small sub-group dates mostly to the late 4th and early 5th centuries, notably bucking the general trends set out for Late Antique burial rites in Northwestern Europe (Theuws 2009, 286-287). These burials comprise a mix of both weapons graves, for example at Ewijk (Blom, van der Feijst and Veldman 2012, 275-283) and precious metal goods such as spoons, for example at Matagne-la-Petit I (Plumier 1987, 146, figures 2 and 3).

This is contrasted with a group of sites consisting of large cemeteries of a later date, generally comprising individuals buried in the *Reihengräber* style. These cemeteries are characterised by numerous richly furnished graves, generally dating from the last quarter of the 4th century onwards (Theuws and Alkemade 2000, 450) with an increase in the frequency of grave goods throughout the 5th and 6th centuries.

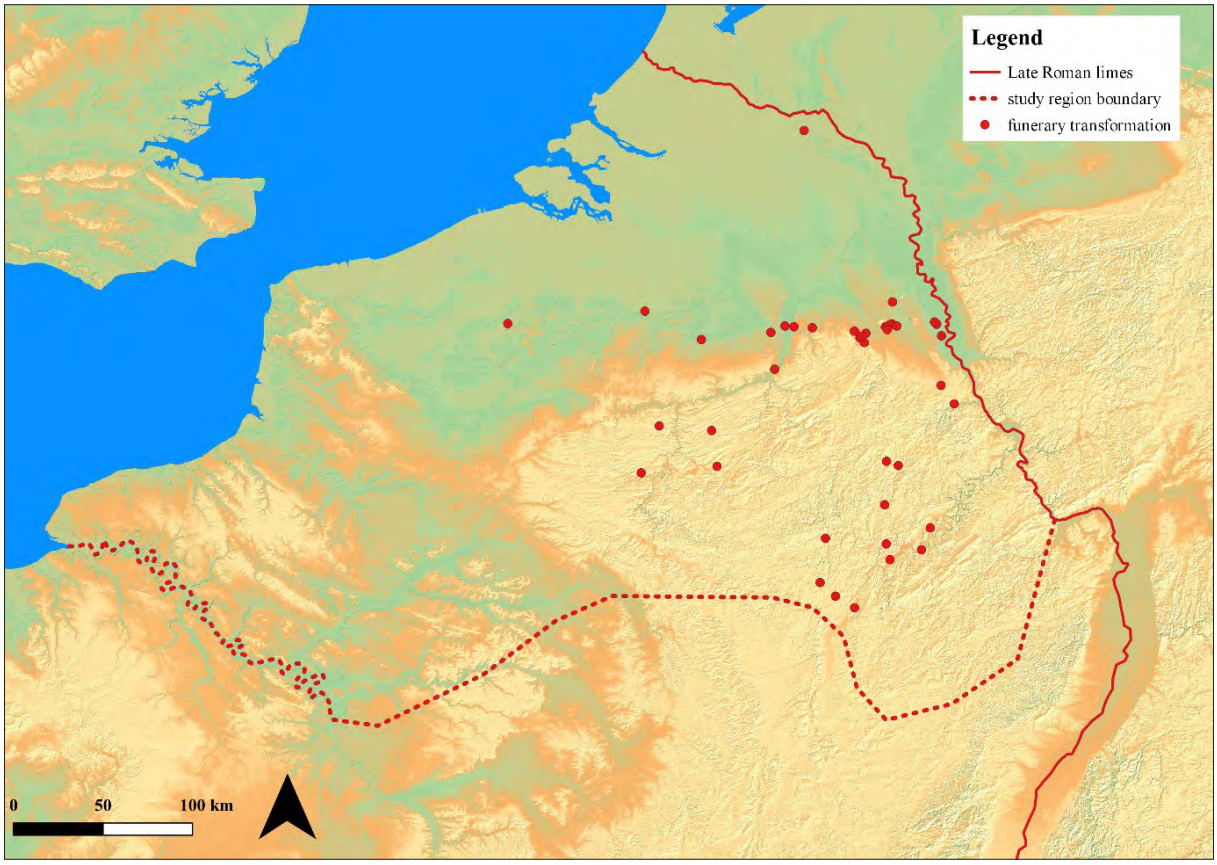

Fig. 4.25: Distribution of funerary reuse of villa terrain in the northwestern provinces in Late Antiquity and the Merovingian Period (J. Dodd).

Traditionally these cemeteries have been viewed through a cultural-historical lens as Frankish in origin. However, it seems more appropriate to interpret earlier iterations within a hybridising burial tradition based on *foederati* who laid claim to Roman elite traditions in the northwestern provinces, something recently argued within the context of *Germania Secunda* (Heeren and Roymans 2018). The majority of these later Frankish cemeteries have been extensively studied and they do not concern the study of this project, except when they overlap with Late Antiquity.

4.4.4b DISTRIBUTION AND PATTERNS

Spatially the distribution pattern is relatively diverse. As a phenomenon, it is generally concentrated in the east: 22 of the 39 studied sites are located in eastern areas of *Germania Prima*, *Germania Secunda* and *Belgica Prima*. Western outliers however, do exist especially in the northern Ardennes. This broad distribution pattern does suggest that burial traditions in the region were being influenced by populations or cultural traditions from the north and east, probably from across the river Rhine. This is further explored in section 4.4.4c.

A dense cluster of sites is present in the German loess belt, especially the well-excavated *Rheinisches Braunkohlerevier*, although this is likely related to the inherent excavation bias of this region (figure 4.25). The density of this cluster lessens towards the west, with a dispersed periphery of funerary reuse stretching along the *Via Belgica* to the Maas Valley. Several distinct phases of funerary transformation are represented in this group, including both 4th and 5th century individual burials as well as larger developed Migration Period and Merovingian cemeteries dating as late as the 7th century. The presence of this

dense cluster indicates the centrality of the hinterland of Cologne and the *Via Belgica* in terms of both population density in Late Antiquity and the Merovingian period but also demonstrates its importance as an interface between two different styles of funerary practice.

A second dispersed cluster of sites is visible in the Moselle region. This group is located north of the river, with only a few sites on its southern side, however, this may be due to the partial study undertaken in the provinces of *Germania Prima* and *Belgica Prima*. It consists of a mix of temporally diverse burial site, although primarily it is made up of sites of Frankish origin. This cluster also demonstrates the important nature of the Moselle Valley in Late Antiquity and the continuity of population centres and socio-economic power into the Early Medieval Period.

4.4.4c DISCUSSION – THE ROLE OF MIGRATION

Although the individual burials themselves provide little data to discussions of ethnicity and identity in the Late Roman and Migration periods, the sites do deliver an important element in the wider data set, that of Late Antique and Frankish burials being in some way associated with villa terrains.

The largest element of funerary transformation in the northwestern provinces is related to the presence of burials in a 'Germanic' style. These burials, beginning from the late 4th century generally consist of a higher total percentage of lavishly furnished inhumations, many with weapons. This burial expression experiences several phases of popularity, contrasting with traditional forms of inhumation, for example, the tradition of small amounts of grave goods, often of a ceramic nature (Halsall 1995, 9). Traditionally interpreted as 'Frankish' for a variety of reasons (*cf.* Heeren 2016, 154), research has questioned this association (Halsall 2000, 177-180; Theuws 2009). The role of migration adds a further dynamic to simple socio-economic assumptions on the transformation of rural settlements in Late Antiquity and the early Frankish period. Within the context of this data set, 'Germanic' burials appear from the late 4th century onwards, peaking in use between the 5th and 7th centuries before burials begin to shift away from former Roman structures (Halsall 2009). This section will concentrate on this early period of reuse. 51% of surveyed sites in the funerary data sub-set are stylistically 'Germanic' in origin. This 51% can be broken down into 13 large cemeteries, some with more than 100 individuals (for example, Rosmeer- Dieperstraat, De Boe and Van Impe 1979) and a smaller group of 7 sites where individuals or small groups of burials are clustered (for example, Newel, Cüppers and Neyses 1971). Typologically, there is little or no distinction between the two groups with weapon graves present at both small and large cemeteries, for example, the presumed *foederati* graves at Ewijk-De Grote Aalst (Blom, van der Feijst and Veldman, 2012, 275) and the 'Herr von Morken' (Hinz 1969). This also includes relatively bare graves, similar to the immediate post-Roman predecessors such as the graves recovered from Winningen (Eiden 1982).

The presence of weapon burials at a wide range of villa sites suggests that this was not solely a regional phenomenon but rather ingrained into new populations moving into the socio-political void created by the end of Roman rule from the early 5th century onwards. Plentiful sources exist for the reuse and expropriation of rural estates by immigrants (Bradley 1998; Williams 1997) and the evidence for the early Frankish period is little different with both the cases of the use of older structures and the reuse of Roman objects (Derks 2017). Despite this, the movement of Frankish groups into the provinces in the second half of the 4th and the early 5th century is not completely borne out in the archaeological evidence. A shifting pattern of burial practices is already apparent from the early 4th century onwards at least. This raises questions on the dispersal and identity of such burials. Recent research demonstrates that 5th century burials are concurrent with the development and spread of northern style three aisled buildings and artefacts of a 'Germanic' form throughout the region (Heeren 2017; Heeren and Roymans 2018).

The interface between burial rites and ethnicity in Northwestern Europe has long been debated. Halsall (1992; 2003) and Theuws (2009) provide the arguments for deconstructing a 'Germanic' identity

for these burials, arguing that 'Germanic'-style graves were instead attempting to claim the Roman elite tradition. Roymans and Heeren (2018) have argued that such graves may represent the *foederati* settlement of the late 4th and early 5th centuries, triggered, above all, by the usurpers Constantine III and Jovinus (Heeren 2017; Roymans 2017). Although the data set presented in this section adds a large number of understudied single Late Antique and Early Medieval graves, it does not add a great deal to our understanding of place and identity. This is primarily due to the poor publication record of most of these graves.

Despite this, some conclusions can be made. Overwhelmingly, singular graves at villa sites date from the 3rd century to the early 5th century, by which time this form of burial on villa terrain was in the process of being gradually superseded by large-scale cemeteries. The placement of individual graves within the fabric of the villa, be it used or abandoned, demonstrates a widespread rejection of traditional 'Roman' taboos of life and death, hinting at other new worldviews developing in the region. This specific placing of burials within the fabric of decaying or still occupied structures is a key point when considering attitude shifts amongst Late Roman or immigrant rural elites. The slow abandonment of Late Antique burial norms indicates a shift away from Roman social convention towards a hybrid Northern European tradition, where elements of *Romanitas*, practically represented by the traditional set of food and table wares, began to blend with 'Germanic' weapon grave traditions and new burials rites which did not respect the classical taboos. Although this does not clearly answer the issues of ethnicity, it does suggest that elites, or at least groups occupying villa terrain in the 4th and 5th centuries, were in the process of changing their cultural outlooks. The transformation of funerary practices apparent in the data set is a key part of making sense of changes in the fabric of rural society as well as elaborating on the role played by migration in Northwestern Europe.

4.4.5 CULTIC TRANSFORMATION

The presence of religious transformation, for example the reuse of a site as a Christian chapel, at villa sites in Northwest Europe has been little studied, partly due to their archaeological invisibility. Developed theoretical models and studies have been undertaken for much of Mediterranean Europe (for example, Chavarría 2006, 2010, 2015) and this study will apply this to the northwest.

4.4.5A ARCHITECTURAL MORPHOLOGY

Morphologically, there is little standardisation to the cultic presence at transforming villas. Three broad categories are visible in data; simple chapels, both of Late Roman and Merovingian origin, a single later Carolingian church and an enigmatic and poorly understood group of sites labelled as sanctuaries (figure 4.26).

Both chapels and sanctuaries bear some relationship to the tradition of private house-chapels and sepulchres. This tradition, well documented in Mediterranean Europe (Chavarría 2015; 2018), exists to some degree in Northwestern Europe; however, it is uncommon with few clear examples of Christian expression. In essence it plays little role in the morphological breakdown of transformation in the region. Architectural variation is difficult to quantify. Very few plans have been published in excavation reports and it is impossible to determine whether there are some elements of standardised Christian architecture.

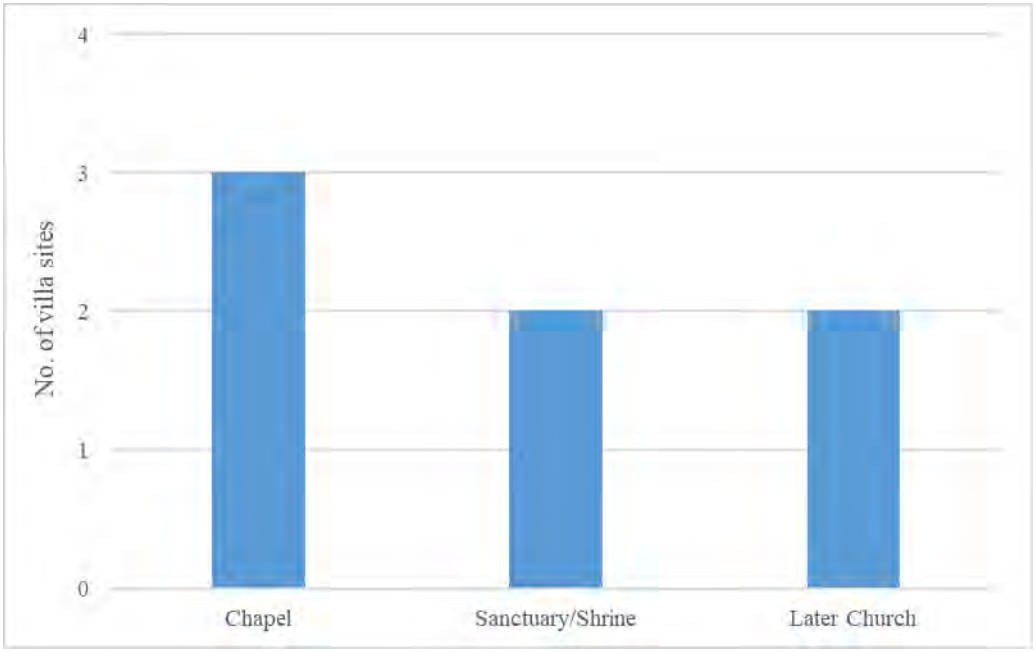

Fig. 4.26: Morphological breakdown of cultic architecture at villa sites (*n*=7) (J. Dodd).

4.4.5b DISTRIBUTION AND PATTERNS

Seven sites in the northwestern provinces display evidence of cultic transformation (figure 4.27). These sites are dispersed without a particular pattern throughout the region. Three sites sit along the *Via Belgica*, located at relatively distant intervals in modern Germany and Belgium whilst the three remaining sites are spread across the Ardennes, the Moselle region and Normandy. The paucity of cultic architecture and the apparent lack of a discernible pattern across the region suggests that socio-religious processes played little role in the transformation of the villa landscape in the 4th and 5th centuries. Ecclesiastical architecture was not utilised as a vehicle for social dominance and power play as it was in the more developed and wealthier regions of Mediterranean Europe, where Christian identity had a greater grip on social elites (Bierbrauer 2003).

The apparent lack of an ecclesiastical dimension to rural power play in Late Antiquity is reinforced by the domination of Early Medieval cultic transformation in the data set. All but one poorly published date to the Merovingian or Carolingian periods. Two later churchs, both Carolingian foundations, lie on top of abandoned villas at Tholey and Morken-Kirchberg. This raises interesting questions about the establishment and expropriation of the Roman past by the church. Placing churches on villas may have allowed ecclesiastical authorities to claim control over decayed but still visible estate centre (*cf.* Bell 2005 for parallels in *Britannia*). This was important in a world where landed assets were more important than taxation revenue. Despite this, comparison with the situation in Southern Europe, where there was an exponential growth in church administration and organisation from the 4th century onwards (see section 5.4.5) demonstrates that the same patterns did not develop in rural contexts in Northwest Europe, where Late Roman and post-Roman power was concentrated in other forms of display.

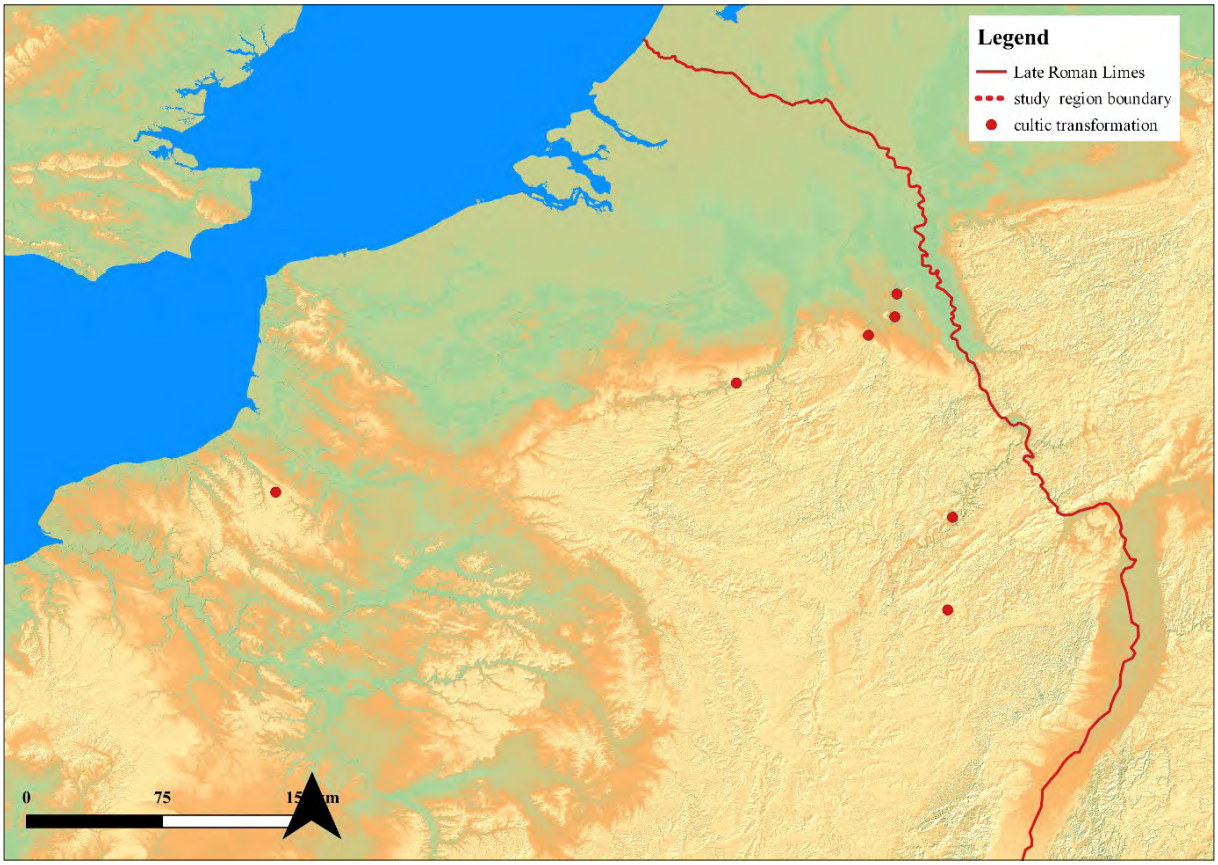

Fig. 4.27: Distribution of cultic transformation at villa sites in northwestern Europe (J. Dodd).

4.4.5c DISCUSSION

Although little can be said about the morphology of cultic transformation, the distribution map shown in figure 4.27 demonstrates the lack of importance of rural churches in Late Antiquity. Other forms of settlement and social pressure were utilised by elites to demonstrate power and value in transforming rural communities. In this respect, it can be argued that cultic transformation is a prime example of the validity of an adapted, modernised form of the Pirenne Thesis. Pirenne argued that continuity of Roman structures in Gaul outlasted the Merovingian kingdom, especially in the south (Pirenne 1939). The structures of Christian temporal and spiritual power continued to develop in Southern Gaul whilst *Belgica* and Germanic provinces remained the preserve of a different form of elite display with the temporal stamp of the church not appearing on the rural landscape until a late Merovingian or Carolingian date.

Despite the lack of a rural religious footprint at villas, there is clear evidence that Christianity was present and had an active role in urban centres. The ecclesiastical hierarchy from Northern Gaul is somewhat understood with large basilicas present at Tongeren, Trier and Cologne in the 4th century, suggesting that the urban population and administrative officials in the cities were to some extent Christianised in a way perhaps not present amongst rural elites (Liebeschuetz 2001, 136-167).

4.4.6 FORTIFICATION TRANSFORMATION

There has been some appreciation of the role played by fortified villas in the northwestern provinces in recent studies (Van Ossel and Ouzoulias 2000, 143-145; Heeren 2018, 141). The fortification of the rural landscape has often been used as evidence of increasing instability in the regions closest to the *limes* (Wightman 1985, 243-249; Van Ossel 1992, 161-165). Despite this, little work has been directed towards establishing general trends or regional distribution models for fortified villas. This phenomenon appears in tandem with the increasing presence of military installations in the region, especially along the strategically important Cologne-Jülich-Bavay axis (Brulet 2017, 41, Fig. 2) and the Maas-Rhine supply corridor (Heeren 2018, 142-143). This section will establish a distribution map of fortified villas within this new militarised framework and analyse the morphological nature of the phenomenon.

4.4.6A: ARCHITECTURAL MORPHOLOGY

Architecturally, fortified villas take a variety of diverse forms. The most common of these is the *burgus*; an oval or circular series of ditches, often but not exclusively, surrounding a tower-like structure (*cf.* Van Ossel 1992, 164; Darvill 2008, 63). *Burgi* are found across the northwestern provinces in both civil and military contexts (Johnson 1983, 138-141; Brulet 2017, 49-51). Another group of villas underwent architecturally diverse fortification of the main house in Late Antiquity with towers, putative elements and features referred to as *créneaux* or *chateaux* (*cf.* François 1980; Van Ossel 1992, 323) added. Several other forms exist, for example the palisade structure as Weilerwist-Groß-Vernich and the stone defences at Tholey.

A final group of sites requires a new terminological approach. Fortified granaries and storage facilities have been identified at several sites and are traditionally referred to as *Speichertürme*. *Speicherturm* is a word with a complex etymological history. It first appears in relation to rural settlement to describe a tower or cellar-like structure at the Mayen villa (Oelmann 1928, 61, Afb. 6). Oelmann linked this structure to a variety of German grain drying and storage buildings from the 18th and 19th centuries including *Kornspeicher* and *Getreidentürme* (Engels 1853, 87-96), although the suffix *–turm* originally only applied to the chimney used for the drying process. This has led to a sequence of related terms without any definition or real clarity and includes *Trockenspeicher* (Fremersdorf 1933, 30-31), *Getreidespeicher* (Fremersdorf 1933, 33-34), *Toren* (Habermehl and Hiddink 2017, 36), *Tour-Silo* (Van Ossel 1992, 151). These terms are often disregarded in English literature with the catch-all term Tower-Silo used instead (Van Ossel and Ouzoulias 2000, 144). One related paper has tied this diverse group to *burgi* and attempted to untangle the terminological mess, without much success (Bechert 1978).

The archaeological reality is that the word *Speicherturm* has been broadly applied to a wide variety of structures (figure 4.28), some of which show characteristics of more traditional *horreum*-like buildings with large outer walls and internal divisions, for example at Rheinbach-Flerzheim (Gechter 1980) and Bodenbach (Henrich 2017). The majority however are typified by large, squat masonry walls and square construction, suggesting that they consisted of one or more floors, although this assumption dates to the problematic interpretation of Building VI at Köln-Müngersdorf (Fremersdorf 1933, 33-34). This obvious dichotomy between the two types of building underpins the problem with the word. Little or no evidence of use has been found in these structures with no archaeobotanical finds to support the storage hypothesis, although this does not necessarily preclude this use. This study cuts through this problem by dividing the current grouping of *Speichertürme* into two distinct groups. The first group consists of fortified storage facilities with thick walls and a rectangular shape, although there is scope for some architectural variation. The second group consists of square tower-like features similar to military architecture such as *burgi* (Bechert 1978; Johnson 1983, 138-141, fig.53) which retains the name *Speichertürme* for terminological convenience.

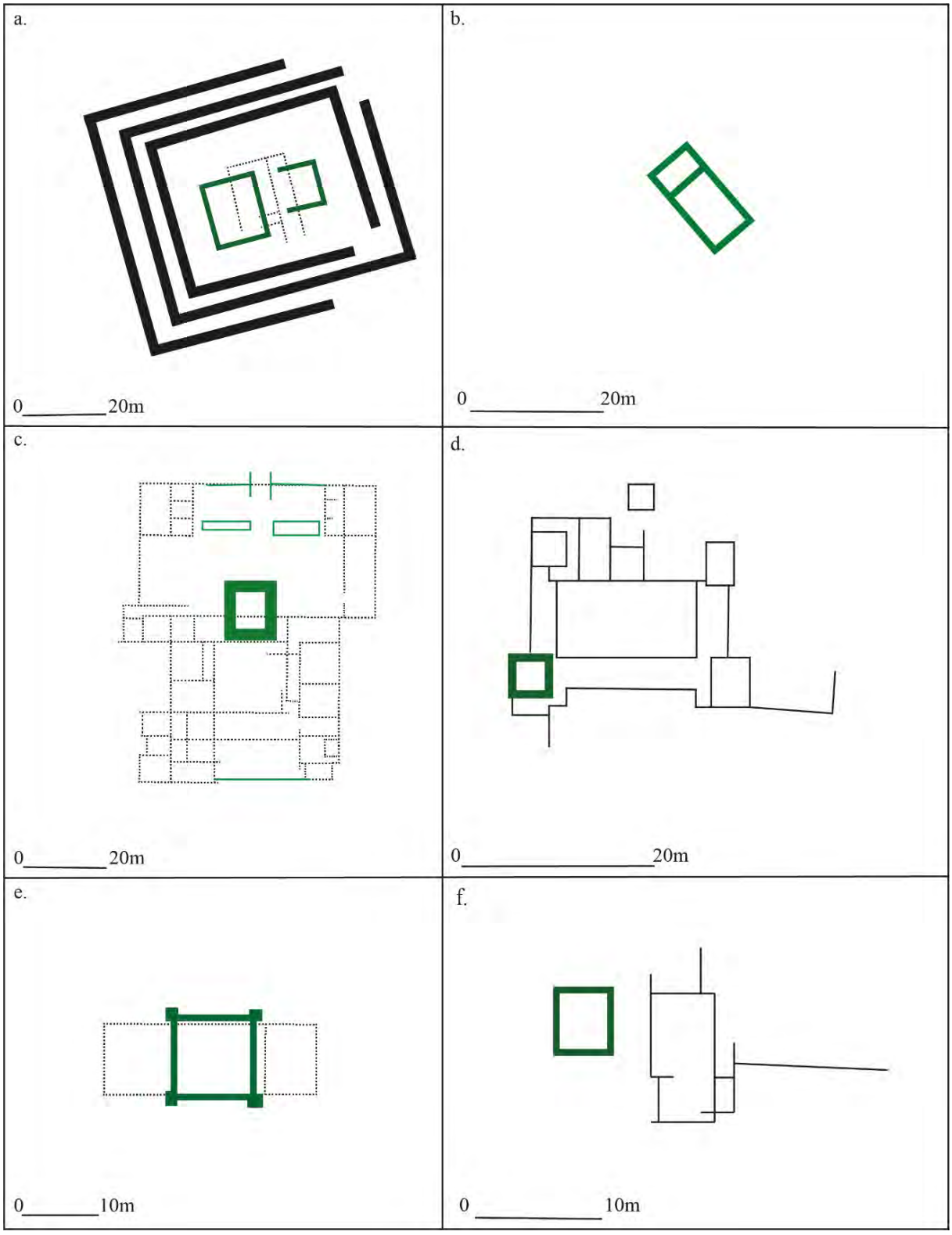

Fig. 4.28: Comparative plans showing structures traditionally labelled as *Speichertürme* in Northwestern Europe; a. Bodenbach (adapted after Henrich 2017, Abb. 6, 236), b. Rheinbach-Flezheim (adapted after Van Ossel 1992a, Fig. 32, 220), c. Mageroy (adapted after Casterman 2016, Abb. 4, 262) d. Köln-Braunsfeld (adapted after Fremersdorf 1930, Abb. 2, 112), e. Köln-Müngersdorf (adapted after Fremersdorf 1933, Tafel 9), f. Vetschau-Butterweiden (adapted after Wagner 1992, Abb. 39, 54).

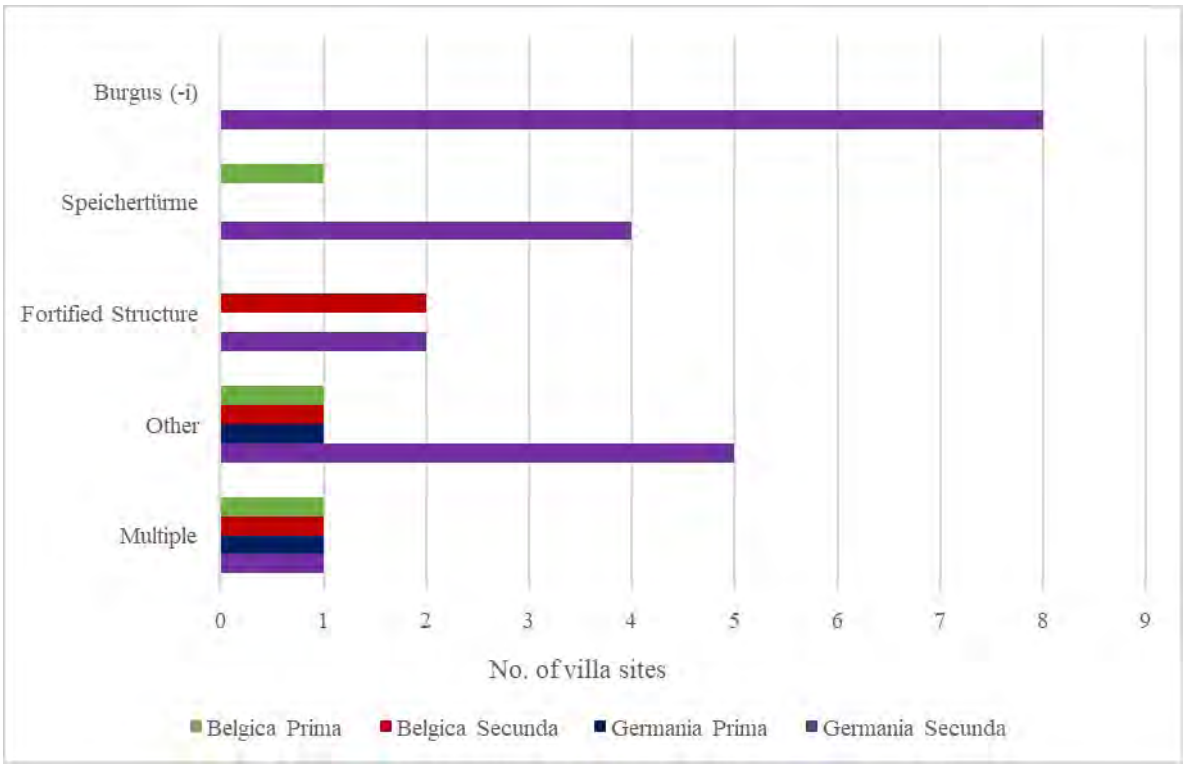

Fig. 4.29: A breakdown of types of fortification transformation at villa sites by Late Roman province (*n*=29) (J. Dodd).

When broken down by type of fortification, *Germania Secunda* dominates the data set and accounts for 69% of sites (figure 4.29). This is due to two factors: firstly, the large geographical range of the province and the collection bias inherent in its size and more importantly, its geographical location on the frontier zone of the Roman Empire and its exposure to assumedly related phenomenon such as violence or population movements from across the Rhine. On the strength of this, previous work has automatically assumed that this must be a reaction to the military vulnerability of the region (Van Ossel and Ouzoulias 2000, 143-145), although the distribution data described in 4.4.7b will show that this is not the entire picture.

The largest group of fortified villas, almost all located in *Germania Secunda*, take the form of *burgi*. These structures are relatively common and fall into two broad categories: military-like installations complete with internal features and multiple ditches, such as the well-built *burgus* B at Vettweiß-Froitzheim (Barfield 1968) and poorly constructed oval *burgi* such as the examples from Köln-Widdersdorf (Spiegel 2002). Figure 4.30 illustrates the architectural variability in this class of structure and demonstrates the broad division between military-like sites and civil-like sites. This division is not always demonstrable in the material culture; however, some military-like *burgi* have been recovered with military equipment and 'Germanic'-style artefacts (Barfield 1968, 92-110; Volsek 2003). A number of villa sites have multiphase or sequentially occupied *burgi*. Several *burgi* appear to have been occupied at one time at Vettweiß-Froitzheim whilst two poorly constructed *burgi* were sequentially occupied at Köln-Widdersdorf. This is not a temporally specific phenomenon, but occurs at all points throughout the late 3rd, 4th and 5th centuries. *Burgi* have generally been treated as refuges for populations in times of crisis and appear from the 3rd century onwards. In some cases, occupation may have shifted wholesale inside the *burgus* structure, for example at Bodenbach and Rommerskirchen-Nettesheim (Ciesielski and Ungerath 2014). One aspect of the proliferation of *burgi* is the sequential occupation of fortification. This is attested at several non-villa *burgi*; however, it only appears at two villa sites in this data set. The time and effort

needed to dig out even a small shallow ditch, let alone repeat the process to move the site less than 100m metres away is difficult to reconcile with images of small groups of survivors squatting in the ruins of villa complexes. It suggests that the occupants of at least some of these sites were able to marshal significant resources for construction purposes. Their appearance at villa sites, in tandem with the increasing use of *burgi* by the army along the main roads (Brulet 2017, 50), has been seen as reaction to the instability of the 3rd century (Van Ossel and Ouzoulias 2000, 143-145). It fits into a larger pattern of fortification across Western Europe in Late Antiquity including *Britannia* (Alcock 1972; Rahtz 1992), the Ebro Valley (Tejado Sebastián 2011; Diarte-Blasco 2018) and in the Danube plain (Johnson 1983, 236-237, Fig. 88).

Speichertürme are relatively uncommon in Northwestern Europe but do occur in all four provinces, both alone and in combination with other fortified elements. Primarily they date to the 3rd and 4th centuries AD. Their distribution will be examined in section 4.4.7b. These tower-like structures are found primarily embedded into the villa structure, although by the time of their construction it is debatable how much of the surrounding buildings remained. The tower-like nature of these buildings suggests that they were designed for visibility and they may have acted as watchtowers; several of them bear a resemblance to the structures sometimes found in *burgi* at both military and civil settlements.

A significant group of sites have had their main houses fortified in some way. These sites are spread across all regions. Architecturally, they are difficult to pin down; in some cases, this takes the form of crenellation[20] on the walls, such as the case at Hambach 132 (Brüggler 2009) or tower corners such as Limetz-Villez (Van Ossel 1989). It suggests that the construction of these buildings was not well planned. This contrasts with the construction of *burgi*, which requires some degree of labour and coordination. When contrasted with the small-scale and poorly executed construction at these sites, the conclusion is that labour, time and resources were not available for building.

Several other types of fortified settlement have been noted in this study. These sites are highly individualistic in architectural morphology with no common trends. They are distributed throughout the region and encompass diverse architecture: from *burgus*-like palisaded enclosures, two stone *burgus* compounds, a large stone defensive wall similar to Gatcombe (Branigan 1977), several poorly understood sites with links to the military and an enigmatic fortified building at Magerot. Two sites within this category have been assigned as fortified granaries, at Rheinbach-Flerzheim and Bodenbach. Both structures date to the 4th century and are located next to or within *burgi*. The relationship between the two forms demonstrates a degree of perceived instability developed over the course of the 4th century and points towards new patterns in the collection and storage of agricultural produce, supporting the assertion that produce was being centrally collected and stored in fortified strongpoints in the small towns and in some *burgi* in the region. Unfortunately, no study has looked at the size and development of these buildings, such research would yield results on the size and capacity of *horrea* at later villa sites in Northwestern Europe and allow estimates for the yields they were expected to store.

4.4.6b DISTRIBUTION PATTERNS

There is significant architectural and regional variability in the data set. The map below places the distribution of these fortified sites within a larger framework and shows several clusters of fortified sites in Northwestern Europe set against 4th century occupied military installations and fortified centres (figure 4.31).

[20] Gaps or indentations, often rectangular, added at intervals in the wall to allow for arrows or other projectiles to be used.

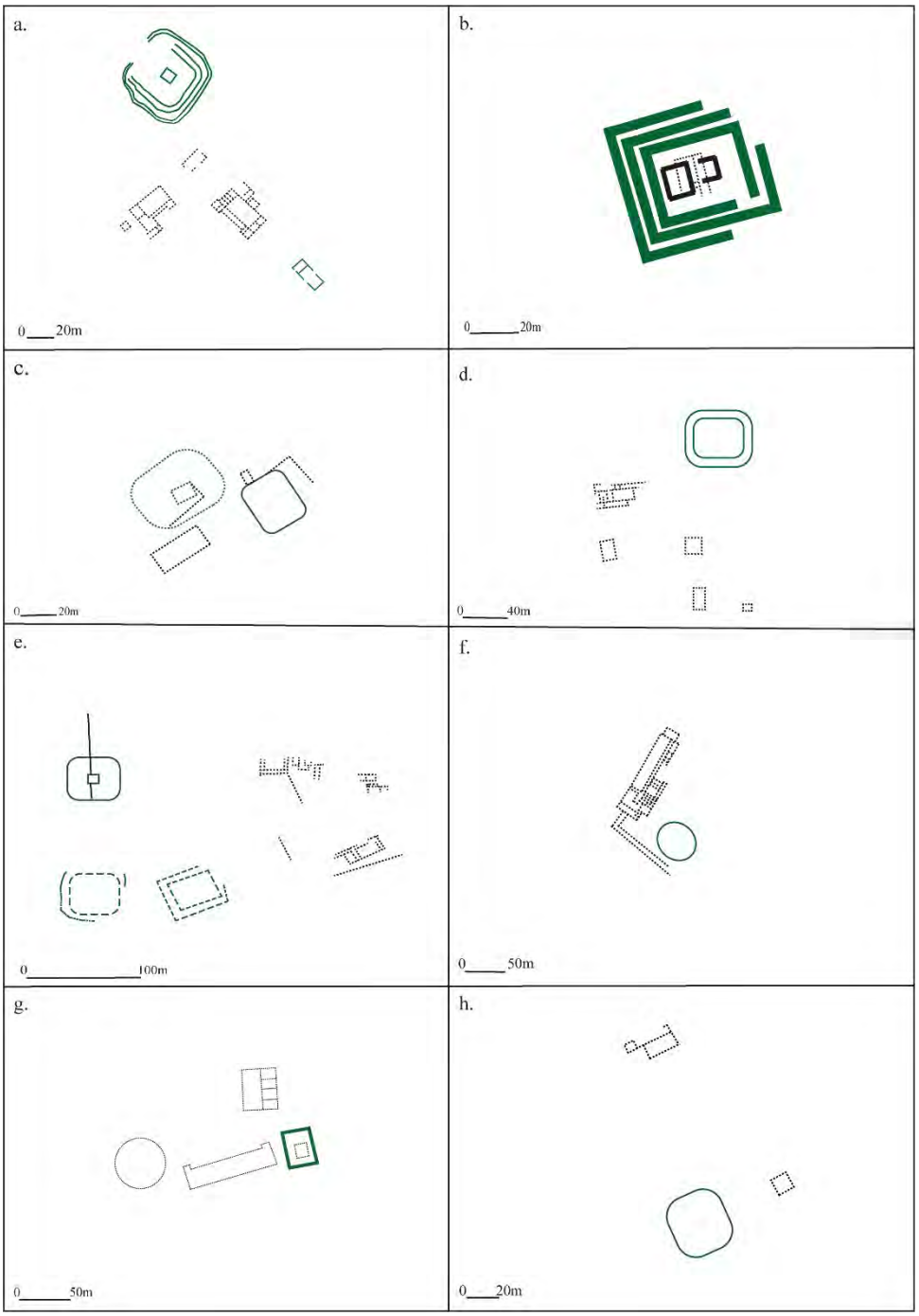

Fig. 4.30: Comparative plans of *burgi* from the northwestern provinces showing the significant variation in design; a. Rheinbach-Flerzheim (adapted after Van Ossel 1992a, Fig 32, 220), b. Bodenbach, (adapted after Henrich 2017, Abb. 6, 236), c. Köln-Widdersorf (adapted after Spiegel 2002, Abb. 12 and 15, 714, 717), d. HA303 (adapted after Van Ossel 1992a, 224, fig. 35), e. Vettweiß-Froitzheim (adapted after Barfield 1968, 9, Abb. 1), f. Rommerskirchen-Nettesheim (adapted after Ciesielski and Ungerath 2014, 124, Abb. 1), g. Wijchen-Tienakker (adapted after Heirbaut and van Enckevort 2011, 26, fig. 4.1) h. HA224 (adapted after Beyer and Jürgens 1995, 517, Abb. 21).

Several major clusters of fortified settlements can be identified; a large group is located in the German and Dutch loess belt, primarily between Jülich and Cologne. A second more dispersed group is spread across the *civitas* of the *Treveri* and two further isolated groups, in *Belgica Secunda* and the Rhine-Maas Region can be identified, both of which linked into the Late Roman military system.

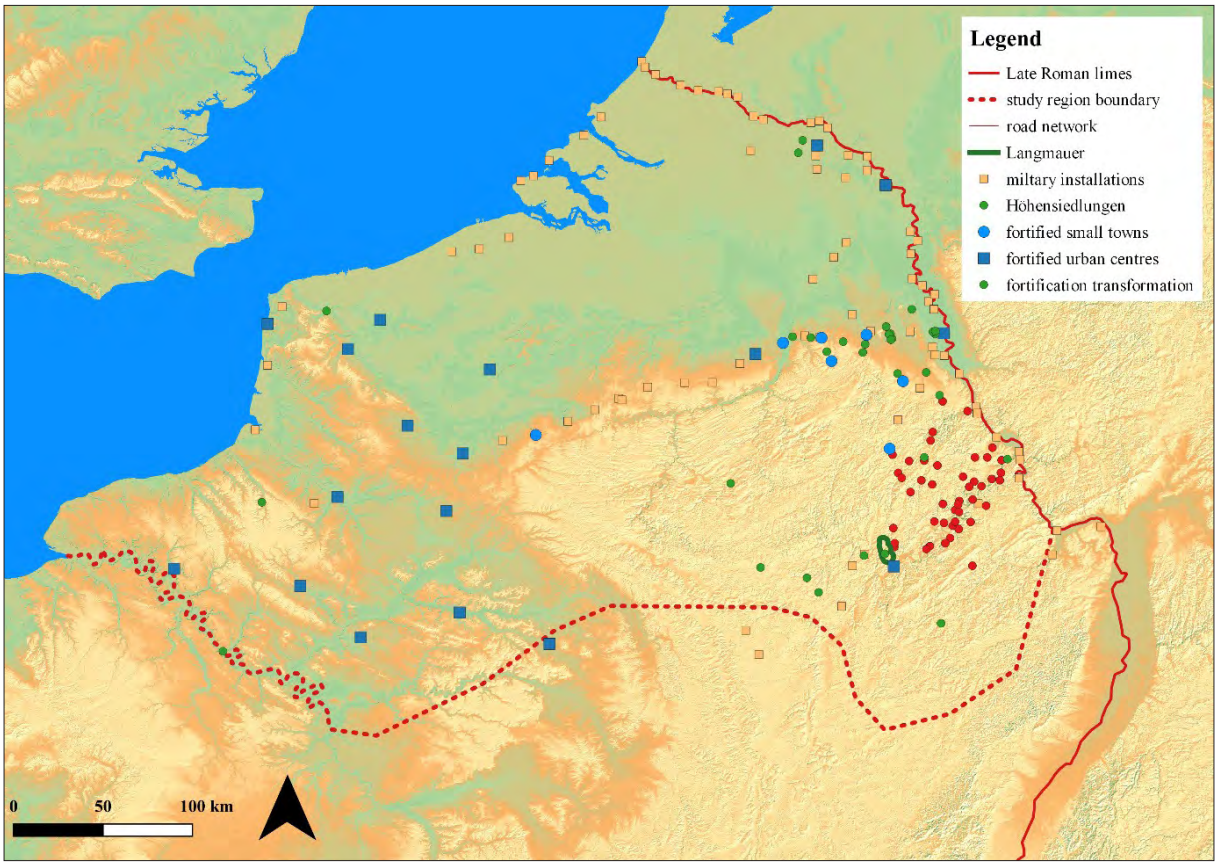

Fig. 4.31: The distribution of fortified villa sites set within the framework of military installations, fortified nucleated settlements and urban centres in the second half of the 4th century (J. Dodd).

The largest group of fortified sites is located in *Germania Secunda*. This cluster is partly artificial, the excavation bias created by the concessions of the *Rheinisches Braunkohlerevier* have necessarily created a larger database of all classes of site in this area. However, this is somewhat offset by recent excavation in *Belgica*, which has demonstrated a distinct absence of fortified settlement in Late Antiquity. Previous work has identified a distinct grouping of *burgi* in the Lower Rhineland and hinterland of Cologne (Van Ossel and Ouzoulias 2000, 145), although in reality, the cluster comprises a mix of fortification types. The dispersed group of fortified villas around Trier is more difficult to assess. They are widely scattered in the Moselle Valley and Ardennes-Eifel region with no distinct pattern to their location. This distribution fits into a wider pattern of rural fortification, including so-called *Höhensiedlungen* (hilltop sites), which are distributed along the Moselle Valley (Gilles 1985b; 1998) and the poorly understood *Langmauer*, a wall enclosing c. 220km^2 and several important villas including Welschbilling, to the north of Trier (Gilles 1985a). The erratic distribution of this group suggests that there was no local tradition of villa fortification but rather such forms of fortification were the product of deep insecurity amidst local populations, similar in nature to the Rhineland group. Two smaller dispersed groups are present along the Franco-Belgian coast and in the Dutch River Area. The first of these groups consists of three sites located in *Belgica Secunda*. Two of these are located on navigable rivers and the third sits overlooking the low-lying Westhoek region. Their presence on navigable rivers or in strategic locations, coupled with the presence of late 4th and 5th century military equipment (Routier *et al.* 2011) suggests that they played a role in the military defence of the region. The area formed part of the 4th century *Litus Saxonixum* commanded by the *Dux Belgica Secundae* (Brulet 2017, 48-49). Fortified and military elements at Zouafques have been tied to the presence of *foederati* operating within this militarised framework (Routier and Thullier 2004). It is likely that both Limetz-Villez, where a 5th century brooch of 'Germanic' origin was recovered (Böhme 1989) and Vieux Rouen-sur-Bresle represent some part of this system as well,

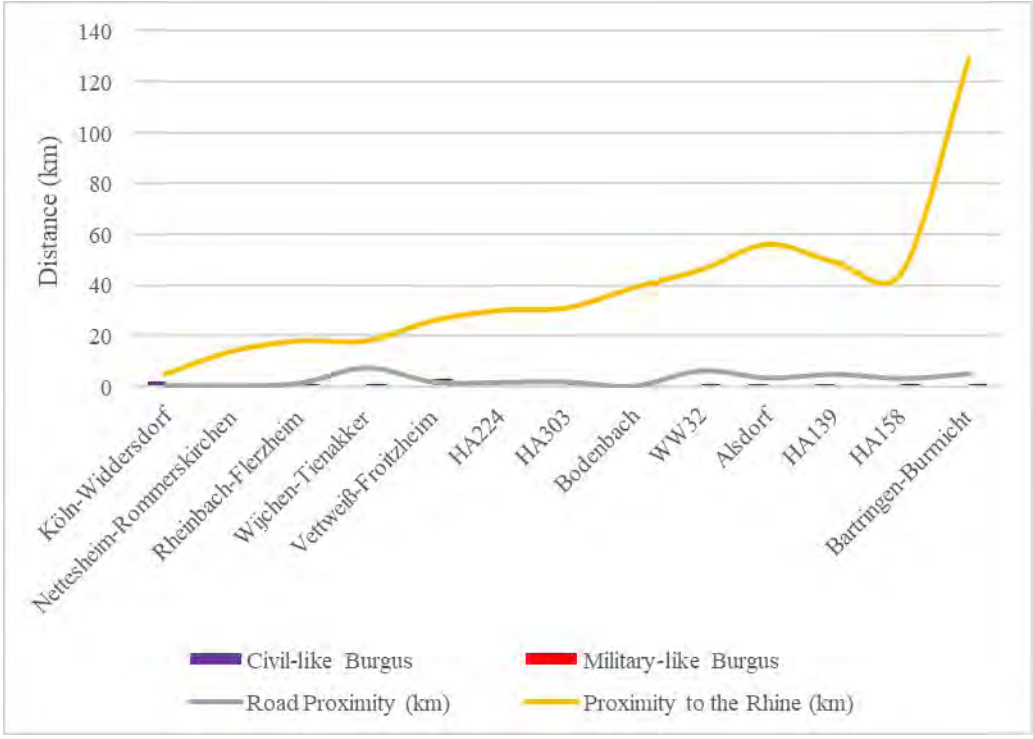

Fig. 4.32: Breakdown of types and quantity of *burgi* set against proximity to the *limes* and road networks (J. Dodd).

although publication, especially in the context of finds data has been poor, so definitive conclusions on the use of these sites cannot be made. A smaller cluster of two sites in the Dutch River Area is much easier to categorise. Both sites bear the hallmarks of integration into the wider military structure of the Late Roman *limes*. Wijchen-Tienakker was abandoned in the late 3rd century but reoccupied as a *burgus* surrounding the former well in the mid-4th century, eventually giving way to a small late 4th and 5th century Frankish settlement. The site has been well published (Heirbaut and Van Enckevort 2011) however, the original 1970s excavations are poorly understood (Janssen 1970, 1979) and this is detrimental to our understanding of the main house and its post-abandonment trajectory. The second site, Ewijk-De Grote Aalst, is more complex. The main house was not excavated, however a 4th century building similar to a fortification found at Maastricht (Panhuysen 2006, fig. 352; Van der Meulen 2017, 32) was uncovered and two 5th-century weapon graves have been found and linked to Frankish *foederati*. The most recent work on the Late Roman *limes* (Van der Meulen 2017) explicitly tied this to the military zone as road stations or watchtowers with the presence of military material at one of these sites suggesting these assertions are correct.

The breakdown of this distribution map (figure 4.32) is illustrated in the figure above. This shows the breakdown of *burgi* by geographical proximity to the road network and to the *limes*. Figure 4.32 was designed to investigate several long-held thoughts about *burgi*: both confirming them and raising new questions on distributions.

The expectation that more military-like *burgi* would be found closer to the Rhine, where vulnerability was more common, does not stand up to detailed analysis. There is little or no correlation between the *limes* and military-style *burgi* and this morphological form is found throughout the region with no military-style *burgus* within 15km of the *limes*. This indicates that *burgi* related to villa terrains were not involved in frontier defence at all but rather related to road surveillance, something noted in previous studies (Johnson 1983, 138; Brulet 2017, 50-53), although not fully analysed in the case of villa *burgi*. It also suggests that there is no correlation between resource investment and proximity to the Rhine. There is little or no evidence for a pattern where maximum investment was made in defensive structures due

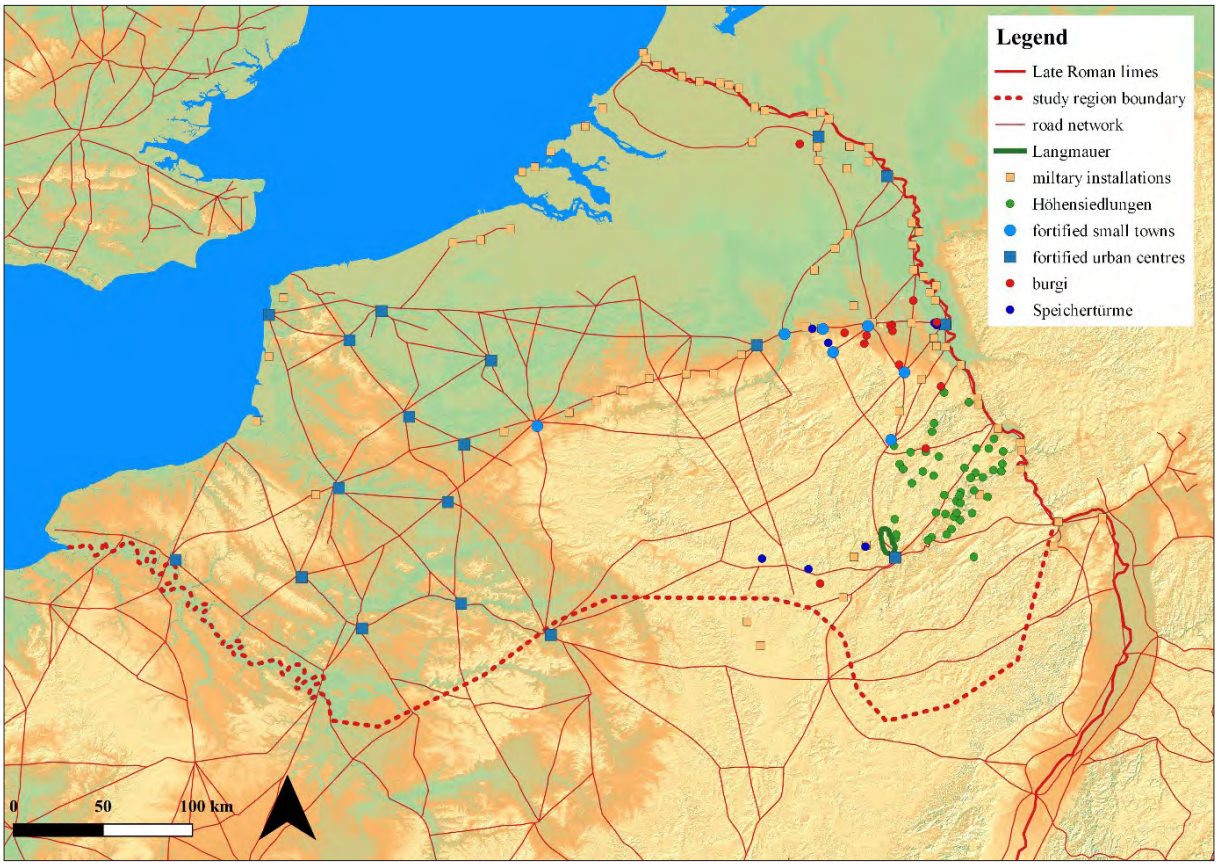

Fig. 4.33: Distribution of all sites labelled as *burgi* and *Speichertürme* at villa sites set against the disposition of military installations and fortified centres in the northwest provinces (J. Dodd). [21]

to the vulnerability of the region. The same hypothesis holds true with greater numbers of defensive *burgi* and their proximity to the Rhine. The closest site to the *limes*, Köln-Widdersdorf, comprises two sequentially occupied and poorly built *burgi*, whilst the well-built and military associated triple *burgi* at Vettweiß-Froitzheim is 30km from the river. This suggests that local populations in the frontier zone were small and did not require large defensive structures to protect people, nor was the manpower present to defend the structures. The data instead confirms the link between *burgi* and the road network. All *burgi* located on villa terrain are within 10km of a main road with the majority having a likely significant visibility along these arteries. In this sense, villa *burgi* fit into the wider development, from the late 3rd century onwards, of strategic road-forts along the highways. It is hard not to draw a correlation between the cluster of *burgi* located at villas between Jülich and Cologne and the lack of comparative lack of overt military sites in this part of the hinterland region (see Brulet 2017, 41, fig. 2).

The patterns in figure 4.33 are partially reflected in the distribution of *Speichertürme*. *Speichertürme* have a broadly similar pattern to the distribution on *burgi* in relation to the *limes*. Some sites are very close to the river, clustered near or around Cologne, and some sites are in the hinterland zones. This broad spread is disturbed by the presence of one site 150km from the frontier zone. This anomaly, the villa at Mageroy, comprises a *Speicherturm* surrounded by a wall with latrines (Casterman 2016) and possible horse troughs and may be a different class of site, such as a *mansio* or road-station, although

[21] The distribution of military sites along the Dutch limes is taken from the work of Van der Meulen (2017). Some of these sites are based on rather meagre evidence. Instead of making judgements on the military data, this study has taken the dataset as representative of the maximum potential number of sites utilised during the 4th and early 5th centuries rather than a true value of which sites were occupied.

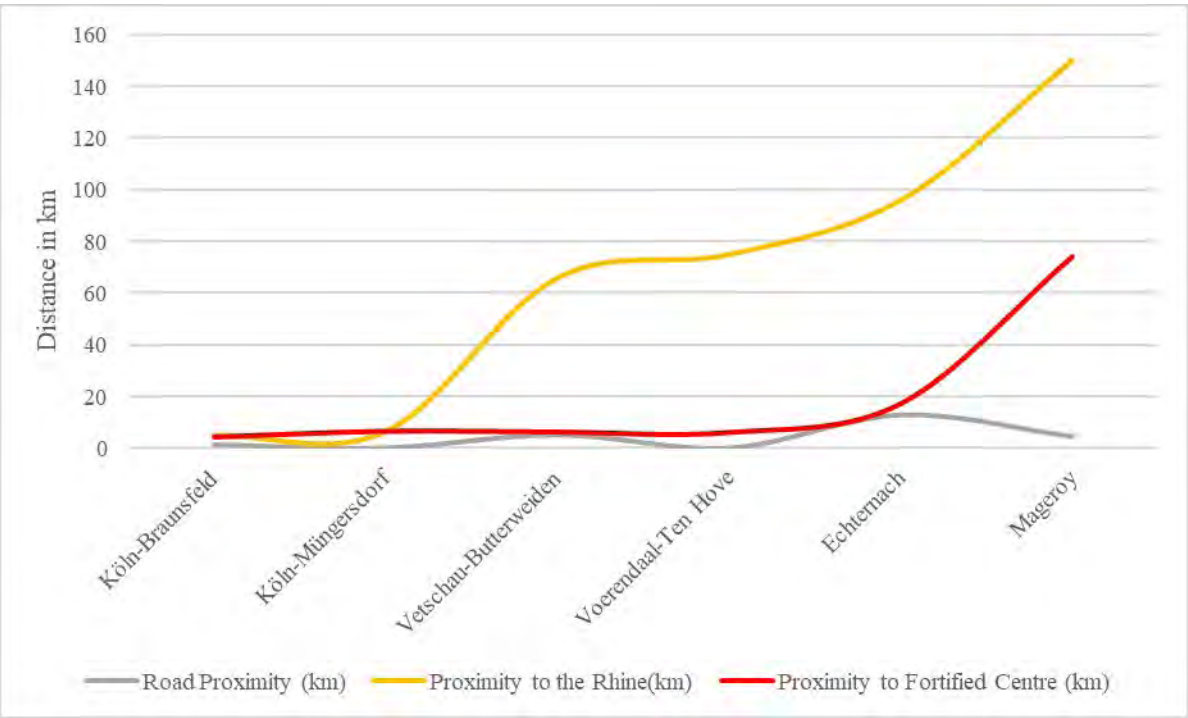

Fig. 4.34: Breakdown of the distribution of *Speichertürme* set against proximity to the *limes*, urban centres and the road network (J. Dodd).

the excavation reports are very difficult to come by[22]. This broad mirroring fits *Speichertürme* into a larger pattern of defensive developments with the majority of sites located a significant distance from the *limes*.

This similarity continues when assessing the proximity of *Speichertürme* to the road network (figure 4.34). This class of building is located very close to roads with only one site, the large multiphase settlement at Echternach, more than 10km from a highway. This proximity would have given these towers a degree of visibility along the main communication arteries allowing them to act within military or semi-military roles. Equally, this visibility could have allowed them to be used as convenient storage facilities for agricultural goods to be deposited or collected. Unfortunately, this correlation does little to solve the basic problems of our understanding of the structures.

However, the pattern of *Speichertürme* does not fit within a distribution relating to urban centres. The argument that *Speichertürme* represent fortified granaries where agricultural material was stored prior to sale or transport to urban centres does not fit this distribution. The majority of the *Speichertürme* are located within 20km of the nearest Late Roman town, a distance well within a day's ride. This would suggest that they were related to gathering local agricultural produce or had no association with agriculture at all. Only Mageroy differs from the trend, however its singular nature has already been explored and can be discounted from the data to some extent.

The similarity of *burgi* and *Speichertürme* data suggests that some of the same factors that drive fortification are present in both cases. The primary similarity, proximity to the road network, indicates that both classes of site relied upon the highways for their primary purposes. In the case of *burgi*, this was a defensive, surveillance and support role, either officially sanctioned or supported by the state or on the initiative of local magnates, something further explored in section 4.4.7c. *Speichertürme* are more difficult

[22] Partially published by the Revue Arc-Hab from 1987 to 2017.

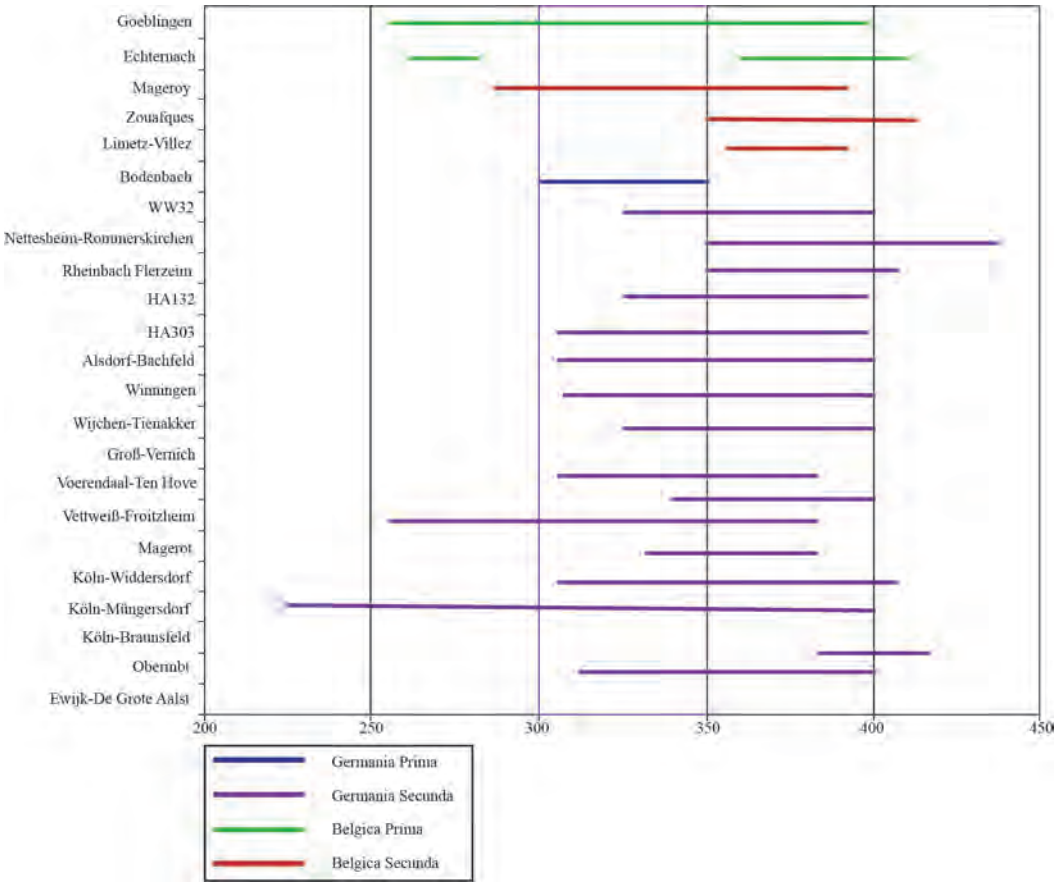

Fig. 4.35: A breakdown of eligible villa sites showing the use and occupation of fortifications over time, with colours differentiating province within the standardised colouring scheme (J. Dodd).

to understand. The pattern matches that of the defensive *burgi*; however, it can also be applied to fortified storage towers placed strategically to store material prior to collection by agents of the state. Both structures are likely to be elements of a larger pattern of official and semi-official highway surveillance and defence in the Germanic provinces and Belgic hinterland.

4.4.6c TEMPORAL PATTERNS

No previous study of fortified rural settlement in the northwestern provinces has examined the temporal diversity of these sites in any detail. Assumptions have been made that a majority of *burgi* date to the second half of the 3rd century with a resurgence in use in the late 4th and 5th centuries (Agache 1978; Agache 1983; Van Ossel and Ouzoulias 2000, 143-145; Heeren 2018, 141). Figure 4.35 fills this research gap, illustrating the breakdown of the data set by fortification period, although this is only a selective sample of the data as many sites are not well published enough to allow for periods to be assigned.

Temporally, the development of fortified villa complexes broadly falls into three spikes of activity: the late 3rd century, the early 4th century and the second half of the 4th century. The most active phase of these phases is the early 4th century, with over half of all fortified sites developing in this period. Smaller numbers of sites appear in the late 3rd century with a larger burst of activity in the later 4th century.

The 3rd century group consists of 5 relatively equally distributed sites, scattered in the Lower Rhineland and *Germania Prima*. These sites show early forms of fortified settlement, with both *burgi* (Barfield 1968) and

a *Speicherturm* (Fremersdorf 1933) present. Several other forms of fortification were also in use, including a short-lived compound at Echternach. These sites, with the possible exception of Köln-Müngersdorf, appear in the second half of the 3rd century and have been viewed as a reaction to the disruption caused by historically attested barbarian raiding (for example, CIL 13.11975/6). These changes relate to the transformation of military installations and the construction of new urban fortifications across Western Europe (Von Petrikovits 1971; Johnson 1983, 83-135). Except in the case of Vettweiß-Froiztheim, which demonstrates a clear military association, and Köln-Müngersdorf, which displays complex and poorly understood stratigraphy, the majority of these sites are haphazardly put together with poorly constructed elements. This slapdash approach to defence indicates that fortification at these sites were reacting to short-term circumstances rather than long-term defensive considerations. This likely developed in reaction to the destruction of villa complexes and the perceived vulnerability of many sites in the immediate aftermath of raiding events.

The primary phase of villa fortification is also related to the vulnerability and perceived instability of the later 3rd century. Fortified elements appear at 13 sites during the first half of the 4th century with the majority located in *Germania Secunda*. The development of these sites conforms to a greater degree of architectural standardisation. *Burgi* are common, in both the developed military-like form as well as civil-like designs, whilst a number of sites enter a development trajectory centered on the fortification of the single building. This development, coming in the 75 years after the most intense period of disruption is a somewhat delayed reaction to the crisis. There are several reasons behind this time lag, commonly referred to in economics as a *decision lag*. The transfer of information was slower and no doubt, it took time for the news of barbarian incursions to spread and for local magnates to react to it. Only in some cases, such as Echternach, were landowners able to muster resources immediately, although the mechanics of this process are poorly understood. The marshalling of significant labour and resources to construct fortification takes a great deal of time. The optimal construction times suggested by Shirley (2000) for the 2nd century fortress at Inchtuthil have been accepted as the norm for military construction, although no parallel has been suggested for 'civilian' sites, it is likely that the process of construction would have been much slower. Local magnates would not have access to the stockpiles of resources held by the army nor would they have had access to military-standard labour (*cf.* Shirley 2000, 96-97 for a discussion on work-rates and 197-199 for labour requirements and breakdown) making the acquisition of resources and the rate of construction much slower. The appearance of a widespread set of fortified sites across a wide geographical region indicates that local magnates were eventually able to marshal significant resources for fortified constructions. This is somewhat complicated by the presence of well-built *burgi* at a number of sites such as Hambach 303. These *burgi* appear to be aping military designs (Johnson 1983, 140, fig. 53) and may be the result of military intervention, either as full-blown army installations, postulated at Vettweiß-Froitzheim, or in the form of semi-official or official support. This support could have taken the form of engineers or specialists directing construction, construction teams of military personal, or simply funding and resources to support construction. The division between well-built *burgi* and more civil-like *burgi* is likely to represent this with some sites offered support from the state and others aping developments with less available resources. This burst of activity is not a short-term solution to vulnerability as in the case of the late 3rd century sites but rather the result of long and medium-term planning at a certain group of sites, primarily located in the frontier zones.

The final 6 sites undergo a fortification phase beginning in the second half of the 4th century. Geographically, they are distributed across the northwestern provinces and they primarily take the form of *burgi*. This phase of activity is less pronounced, and it is difficult to assign it to a reaction to barbarian incursions or disruption. Instability is evident in the region, both through the development and occupation of new fortified sites and in the historical sources, which attest to significant conflict on the west side of the Rhine under Julian (*Amm. Marc.* 16.2-4 to 20.1.2-3) although such an association can be problematic given the lack of dating evidence or understanding of many fortified sites. Despite this, some association is likely. The temporal evidence has suggested bursts of fortification activity tend to fall after major disruption to the region and to a degree, the late 4th century phases also support this.

Figure 4.35 also illustrates the rough dating for the end of occupation phases at fortified settlements. A significant proportion of sites do not see their fortifications utilised into the 5th century and enter an abandonment trajectory, either permanently or to be later reused by Frankish groups with little or no relation to the use of space during the fortified phase. The abandonment date of many of these sites is somewhat suspect, partly for the reasons laid out in 2.8 and partly due to a lack of publication for many sites. In response to this, a broad date of c.400 has been assigned to the majority of sites, although this is likely to be the midpoint of a possible end of occupation at most sites. Some sites are utilised into the 5th century, for example, the *burgus* at Rommerskirchen-Nettesheim and it may be that the majority of fortified sites experienced a shift towards different occupation styles or abandonment in the fluid socio-political landscape of the early 5th century. In essence, little can be said about the abandonment or supposed abandonment of many of these sites, mainly due to these problems, although it is clear that fortified villa settlements of every type saw little or no use beyond the first quarter of the 5th century.

4.4.6d DISCUSSION

The above sections have elaborated on the architecture and spatial distribution of fortified villa complexes in the northwest provinces as well as addressing some of the terminological and methodological issues with the topic. It has drawn out the highly varied approach to fortification whilst illustrating the dominant role of *burgi* in the fortified landscape of the 4th century. Several major points can be taken from the data presented above.

The simple presence of fortified villa sites throughout the late 3rd and 4th centuries indicates that vulnerability and instability were present or, at the very least, there was a widespread perception of instability by local populations in the northwestern provinces. Fortification was driven by periods of instability in the region. Each of the three major bursts of activity follow major periods of instability or disruption (see 4.4.7c) with the fortification of villa settlements developing as a reaction to this. This is supported by the repeated evidence from the reuse of other forms of fortified settlement, for example the refuges that developed in pre-Roman hillforts or on virgin sites (Johnson 1983, 232, fig. 87). The lack of a mid-5th century fortification period, following the unstable early 5th century can be viewed within the framework of the larger collapse of the rural economy after the breakdown of Roman rule. The long-term use of these sites suggests that the perception of instability by local elites radically altered the layout and zoning of certain sites throughout Late Antiquity.

Material culture has been a significant issue for the interpretation of fortified villas. Military or weapons finds are not altogether common with only a few sites occupied by a demonstrably military presence. This indicates the primary civil nature behind many of these sites and points towards a more informal presence. Fortified villas, with a few exceptions in border zones near the Rhine, likely served as *refugia* for local populations and may have been manned by local militia organisations, with either official support or tacit encouragement, as has been postulated for fortified towns (Brulet 2017, 51). Some of these sites stylistically aped military architecture, probably from the perception that military architecture was a good deterrent against attack, and were constructed with this in mind, perhaps with the support of military engineers. Further work on this particular facet is needed, with comparative studies of military and 'civilian' *burgi* needed.

The disruption of the 3rd century is responsible for a great deal of fortified settlement in the region, either preemptive or relative. It is difficult not to support the traditional view that severe rural dislocation prompted the construction of fortified elements at surviving sites from the second half of the 3rd century onwards, especially in the regions closest to the Rhine. Despite this, the picture is much more nuanced; social elements, such as the power of local magnates, the role of state agents and the army as well as individual or group perceptions of vulnerability played a key role in the siting and distribution of fortified villas.

4.5 (FORMER) VILLAS AND CITIES: THE URBAN-RURAL DYNAMIC

The larger cities of *Gallia Belgica* and the Germanic provinces play a key function in the role of the elite in Late Antiquity. Evidence from urban centres in the region points towards a high-level of upkeep in existing domestic buildings and the construction of new high-status housing at sites, for example Trier, where this was conducted in tandem with imperial building projects (Esmonde Cleary 2013, 201-206). Other centres, such as Tongeren (Vanderhoeven 2017) and Cologne (Aten *et al.* 1998, 488; Huffman 2018) also underwent refurbishment and gained blocks of important high-status housing. This unequivocal evidence at a range of cities in the Belgic and Germanic provinces, coupled with evidence for less investment in rural estates is indicative of a shift towards the primacy of townhouses in the minds of the elite. Indeed, this is the only region where such a model is clear in the archaeological evidence.

The clear evidence for abandonment and transformation at villa sites in this region points towards a permanent movement of elites from their rural villas to their townhouses, leaving the villas in the hands of agents or estate managers or permanently abandoning their rural estates. Elite populations had maintained both urban and rural residences in the Early and Middle Roman periods (Roymans and Derks 2011, 14-15), however, the evidence suggests that in the 4th century, elite groups in the northwest provinces, excluding the Moselle Valley, were permanently utilising the urban residences over the rural villa complexes. This shift would allow estates to still function in some areas as traditional producers and consumers, for example, south of the *Via Belgica*. This is visible in *Belgica Secunda*, where high-status structures are present in the fortified town of Cambrai (Coquelet 2011, 290-291) and new potential *domus*-style buildings are found at Tournai (Loridant 1995). The movement of elites into fortified towns is less apparent around Trier. Trier acted as the administrative capital and military headquarters for Northern Gaul. Naturally, this led to an influx of bureaucratic and military officials with a higher purchasing power. The Late Antique aristocracy of the Moselle Valley are seen through this prism, with high-status villas surrounding Trier and acting as the rural retreats of state officials. This goes hand-in-hand with a series of opulent *villa suburbana* constructed inside the city in the 4th century and suggests that the link between town and country was preserved in a traditional style in *Belgica Prima* in the Late Roman period. This picture is somewhat complemented by the patterns around major urban centres such as Tongeren and Cologne. Both these cities experience major private building projects in the 4th century and there is evidence of continued existence of villas in the hinterland of the cities. However, the Moselle Valley differs significantly in that evidence from villa complexes shows little evidence of disinvestment or transformation until the late 4th century. The link between Trier and its hinterland only began to break down in the late 4th century, following the withdrawal of the administrative presence to Southern Gaul (Heather 2017), at which point there is an exponential increase in abandonment and transformation at rural villa sites in the Moselle Valley.

The withdrawal of elite groups from the rural to their residences in the urban sphere (*cf.* Roymans and Derks 2011, 14-15) points towards some degree of urban continuity in the towns of Northern Gaul. This contrasts sharply with the increasing evidence for a lack of continued high-status rural occupation north of the *Via Belgica* and an increasing rate of transformation over large parts of the Belgic hinterland and demonstrates the changing priority of the elite in times of socio-economic stress.

4.6 REGIONAL CONCLUSIONS

Belgica and the Germanic provinces present the largest group of data in this study. When combined with a statistically based analysis of the data, it provides a thorough overview of villa transformation in the region. Naturally, the spread of data is inherently biased; conversely skewed both at the western and eastern ends of the study region, through the tradition of non-invasive archaeology in Picardy and the full landscape excavations of the *Rheinisches Braunkohlerevier* respectively. Naturally, this has led to a greater weight of excavation data collected from *Germania Secunda* compared to *Belgica Secunda*.

The northwestern continental provinces experience a great deal of regional variation, as it be expected from a geographically and socially diverse region. Transformation with continuous occupation at sites is a key element in the south and southwest of the study area, in the provinces of *Belgica Prima*, *Belgica Secunda* and *Germania Prima*. The importance of this declines towards the northern reaches of the study area. North of the main highway between Cologne and Bavay, site abandonment and transformation within a reoccupation phase are a more common element to the Late Antique villa landscapes. This division has been previously noted and the boundary between these two zones has generally been assumed, on the basis of micro-regional studies (for example, Gechter and Kunow 1986; Lenz 1999), to have been the *Via Belgica*. The general thrust of these studies has been proved correct on a much larger canvas in this chapter. The wider data set demonstrates that the most intense abandonment events occurs closer to the Rhine *limes* with a decreasing intensity towards the south and west. This is supported by the same pattern for reoccupation phases, which generally concentrate in the north and east of the study region. The relatively marginal role of the northern reaches of *Germania Secunda* in the wider make-up of the Late Antique landscape in the early 4th century is offset by its late 4th and 5th century importance. Reoccupation and transformation of abandoned villa sites in the province was driven by other factors, primarily the migration of new groups from across the Rhine into the empire. This is visible in the data set through the evidence for new building styles and new material culture appearing from the north and east. This shift is perhaps best visible in the *Germania Secunda* because of the well-documented habitational discontinuity from the late 3rd century onwards (Lenz 2001; Heeren 2017, 155-156) and therefore new populations are more clearly visible in a partly empty province.

The large-scale nature of the data established that the temporal scale of villa transformation is not solely limited to the 4th and 5th centuries, but rather forms part of the wider reorganisation of rural settlement from the early 3rd century onwards. This mirrors our pre-existing understanding of the decreasing size and capacity of all forms of rural settlements at the time (*cf.* Heeren 2009). The beginnings of architectural transformation in the villa fabric demonstrate that structural socio-economic problems were inherent even in the developed 'classical' villa landscape of the Middle Roman Period.

Chapter 5 - *Gallia Narbonensis* and Northeast Tarraconensis

5.1 GENERAL INTRODUCTION

This chapter will examine the regional trajectories of transformation and abandonment of villas in Western *Narbonensis* and Northeast *Tarraconensis*. It will begin by introducing the rural landscape and regional historical background before continuing through an exploration and detailed analysis of the morphological and typological variations in the transformation of the Roman villa in *Gallia Narbonensis* and Northeast *Tarraconensis*.

5.2 THE ROMAN RURAL BACKGROUND

Gallia Narbonensis and Northeast *Tarraconensis* were both highly integrated into the socio-economic fabric of the Roman world throughout Late Antiquity. This study deals with the transformation of the villa landscapes in selected parts of three Late Roman provinces: *Narbonensis Prima*, *Viennensis* and *Tarraconensis*. *Narbonensis Prima* and *Viennensis* formed part of the Diocese of Vienne/*Septem Provinciae* whilst *Tarraconensis* formed part of the Diocese of *Hispania* (figure 5.2).

5.2.1 GALLIA NARBONENSIS

Late Roman *Narbonensis* was an economically developed region with a high degree of urbanisation. Large cities, such as Arles (*Arelate*) and Nîmes (*Colonia Nemausus*) acted as a top tier of administrative and economic centres. The large cities were complemented by a range of secondary urban centres such as L'Argentière (*Rhodanousia*) and Marseilles (*Massilia*) which acted as a lower tier for social and economic life in the region. This urbanised landscape was supplemented by a range of smaller nucleated *agglomerations secondaires*: semi-urban and town-sized nucleated settlements that acted as social and economic nodes within the rural landscape (Fiches 2002; Leveau 1993; 2005). Administratively, the region was divided into *territoria* governed from the large urban centres (Bermond *et al.* 2013, 84), similar to the *civitates* in Northern Europe. By the Late Roman period, many of the smaller ports such as L'Almanarre (*Olbia*) were in decline, having lost much of their commercial importance to larger centres such as *Massilia* (Esmonde Cleary 2017, 295-299). The urban centres of the region underwent a process of *étiage*; this catch-all French term fits within the Gibbonist tradition of derogatory language (Esmonde Cleary 2013, 102); it generally refers to the contraction and abandonment of sectors of urban centres and coincides with a functional transformation within the economic life of the cities. This process begins in *Gallia Narbonensis* in the late 2nd or 3rd centuries (Heijmans 2004 for Arles; Leblanc and Savay-Gerraz 2004 for Saint-Romain-en-Gal) and forms an integral part of the urban landscape in Late Antiquity.

The rural landscape itself was based on a cadastral system (Christol 1998). Villas dominated this landscape with a high degree of socio-economic integration into the wider Mediterranean *milieu*. The highest densities of villas were present along the fertile littoral plain and in the Rhône valley, where easy access to markets and cities was assured (Buffat 2011, 41-51; Bermond *et al.* 2013, 93-94). Unlike other

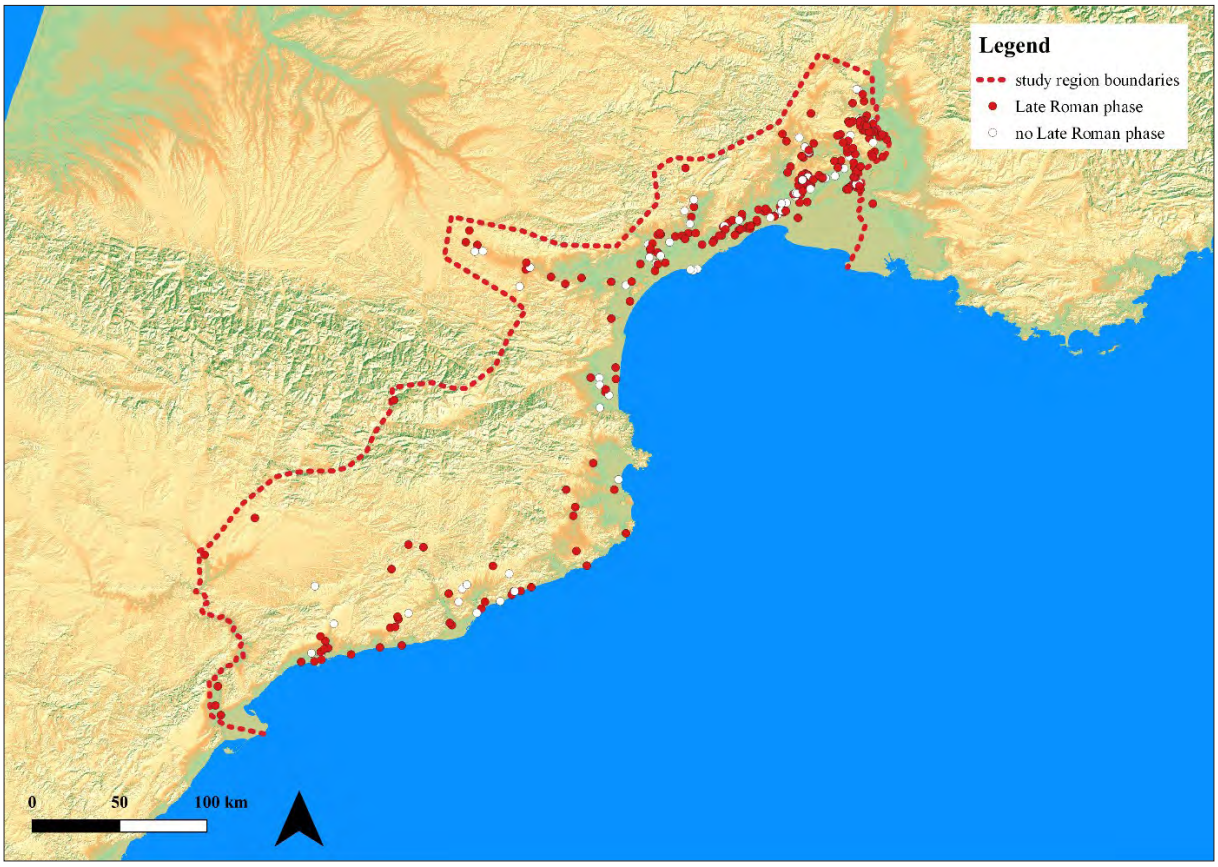

Fig. 5.1: Excavated or surveyed villa sites in western *Gallia Narbonensis* and Northeast *Tarraconensis* differentiated by presence/absence of a Late Roman occupation phase (J. Dodd).

regions under study, such as Northern Gaul, the villa landscape of *Gallia Narbonensis* was not established around the supply of the army but rather organically grew out of more Italic models of a town-countryside relationship. Despite the widespread presence of the villa, in some areas of the region such as the Montagnes Noire and the Pyrenees, traditional forms of architecture and landscape exploitation persisted (Pellecuer 1993; 1996; Badan *et al*. 1995).

Villas acted as the primary driver for production and consumption in the rural landscape. The cadastral system was imposed after the conquest of the region in the 2nd century BC and its transformation into a province in the 1st century BC. The cadastral system was based on the *iūgerum* as a land measurement (Chouquer and Favory 1991; *cf.* Fiches 1996). Agrarian production was primarily geared towards the cultivation of the 'Mediterranean trilogy'. This combination of olives, grain and vines was ubiquitous across the region; however, there is some evidence of variation with a vibrant Early Roman olive oil industry in place at the vast majority of rural sites (Buffat *et al*. 2001). The Early Roman period saw an increase in occupation density and, by extension, agricultural capacity. This trend began in the Late Pre-Roman Iron Age and continued into the 2nd century AD in some places (Van der Leeuw *et al*. 2003, fig. 33). New foundations of both villas and non-elite settlements appears in tandem with the expansion of agriculturally active zones and the exploitation of more agriculturally marginal landscapes, such as the *garrigue* (*cf.* Fiches 2002; Esmonde Cleary 2013, 287), a type of upland scrubland also known as *maquis*. The landscapes were intensively cultivated with much of the region established as 'model' colonies of Rome, consisting of an urban centre and rural hinterland (Leveau 1992, 597-636). Evidence suggests that the increasing carrying capacity of the rural economy encouraged the communal pooling of resources into larger and more efficient processing facilities. Conglomerates of rural settlements, notably

in the case of the Barbegal water mill (Benoit 1940, 71-80; Leveau 1996, 142), saw significant benefit in co-operative use of shared facilities.

By the 3rd century AD, this rural landscape was undergoing rapid social and economic change. From the 2nd century onwards, the high proportion of villas within the landscape began to decline. This background rate of abandonment (Van der Leeuw *et al.* 2003, fig. 33) is complemented by a sharp decline in non-elite rural settlements. This shift likely represents the increasing importance of the domanial system and the rationalisation of landholding patterns into larger units. The villa system experienced a series of economic shocks from the 2nd century onwards. Olive oil production drastically dropped, prompting periods of reorganisation in rural settlement patterns at the end of the 2nd and mid-3rd centuries (Brun and Congés 1996, 235-236; Raynaud 1996, 198-204). Although there is significant variation across the region, these shocks are linked to contraction and abandonment phases at a wide array of villa complexes (for example, Trément 2002, 218, fig. 1). The decline in productive capacity is somewhat offset by evidence that localised production of olive oil continued at increasingly nucleated settlements. Primarily, this evidence is found at newly transforming villas and *agglomerations secondaires*. It takes the form of increasing architectural evidence for a shift towards smaller-scale facilities. This crisis has been explicitly linked to other socio-economic changes in the region. The decline of industrial production in urban and semi-urban contexts has been tied to a less intensely focused economy and perhaps the conversion of the cities to nodes in a larger integrative economic system (Esmonde Cleary 2013, 318). The abandonment of larger centres, such as *Glanum* (Roth-Gongés 1992, 40) and *étiage* in both Arles and Saint-Romain-en-Gal (Leblanc and Savay-Gurrez 1996; Heijmans 1996) have also been linked to the wider '3rd-century crisis' in *Narbonensis* (Fiches 1996).

5.2.2 NORTHEAST TARRACONENSIS

Tarraconensis was another developed region with a high level of integration to the socio-economic nexus of the Mediterranean network. The large urban centres, including the provincial capital at Tarragona (*Tarraco*) and the large port cities of Barcelona (*Barcino*) and Empúries (*Emporiae*) were concentrated on the littoral plain. These large ports acted as focal points for long distance trade, and most had gained substantial walls by the end of the 4th century (Kulikowski 2004, 101-109). The large urban centres were complemented by a range of towns such as Mataró (*Illuro*), Lleida (*Ilerda*) and Badalona (*Baetulo*), most of which were primarily economically focused in-nature. These urban and semi-urban settlements were supplemented by an intermediate tier of *aglomeraciones secundarias*, a group of very poorly understood and poorly explored nucleated sites (*cf.* Kulikowski 2006; Esmonde Cleary 2013, 111-112). Research into *aglomeraciones secundarias* in *Hispania* has generally been limited to the 1st and 2nd centuries AD.[23] Consequently, the trajectories of many of these sites are unknown and cannot be compared with other regions. There is, however, scattered evidence for *transformación* at coastal towns and *civitas* capitals in the Ebro valley (*cf.* Kulikowski 2004, 85-140; Diarte-Blasco 2017).

The villa landscapes in Northeast *Tarraconensis* formed an integral part of the urban-rural interface in the region. Rural settlement studies have generally focused on the Catalan Coastal Plain where work has demonstrated the dense nature of the villa landscape (Carreté *et al.* 1995; Chavarría 1996; Prevosti and Gutart i Duran 2011). Dense centuriation (Gurt Esparraguera and Palet Martinez 2001, 314, fig. 8), especially in the *Ager Tarraconensis* (Palet and Orengo 2011), supported a highly productive landscape geared towards the production of grain, oil, and wine. The littoral plain appears to have been exploited

[23] for example, recent studies elsewhere in the peninsular: Pérez Losada 2002; Fernández Ochoa and Cerdán 2003; Alarcão e Silva 1995

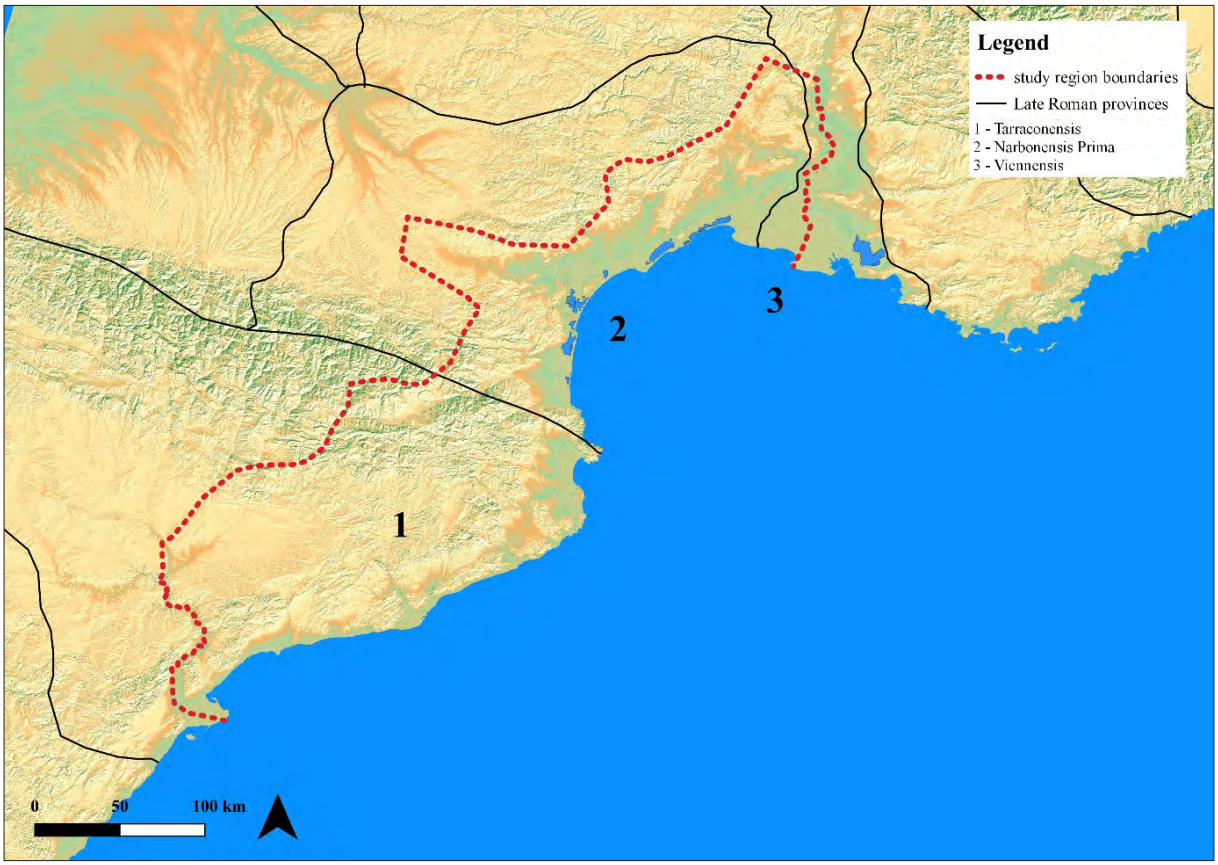

Fig. 5.2: The dioceses of *Hispania* and the *Septem Provincae* set against the study region boundaries c. AD 350 (J. Dodd).

via a domanial system, with large estates and *latifundi* present (Macias Solé 2012). This indicates that a cereal-based economy appears to have continued into the 5th century, at which point there is more evidence for pastoral use of the landscape (Gurt Esparraguera and Palet Martinez 2001, 303-311). Little work has been directed towards establishing the proportion of non-villa landscapes (Esmonde Cleary 2016, 291), although it is reasonable to assume the various Catalan mountain ranges saw continued use of traditional exploitation practices.

Recent surveys have produced clear evidence for a decline in the number of occupied rural sites and presumably a decline in agricultural output from the 3rd century onwards. This development is in-line with the situation in Southern Gaul (Prevosti and Gutart i Duran 2011, 395). The large cities appear to undergo *étiage* (for example in Barcelona, Perich 2014) whilst rural settlement appears to experience a relatively widespread phase of abandonment, traditionally ascribed to a likely apocryphal Frankish incursion in 259/260 (*cf.* Marot 1998). This incursion has traditionally been seen as a raid of Franks from across the Rhine that penetrated as far as Tarragona (Aurelius Victor, *De Caesaribus* 33.3) and, when coupled with a totally invented invasion in 272 (Kulikowski 2004, 68), has plagued modern studies of late 3rd and 4th century Spain (Cepas Palanca 1997, 18-24 for the historiography). The archaeology does not support such an invasion, with little or no evidence of destruction horizons in either Barcelona or Tarragona, or an appreciable identification of fortification to this period (Kulikowski 2004, 103). Instead, this abandonment phase probably relates to the wide-ranging reorganisation of rural landscapes in the 3rd century. Changing landholding patterns and perhaps a nucleation of population into *aglomeraciones secundarias* and large villa estate centres as part of large-scale Late Antique reorganisation of land management (see Esmonde Cleary 2016, 291-292 for a broad overview of the arguments), is a more likely culprit for abandonment than military destruction.

5.3 HISTORICAL INTRODUCTION

The southern study area differs significantly in its historical development from Northwest Europe. Both *Gallia Narbonensis* and *Tarraconensis* were highly integrated into the transportation and economic arteries of the Mediterranean world and had been part of the Roman Empire for nearly three centuries by the beginning of the period under examination.

Southern Gaul weathered the 3rd century politically and socially intact. There is, however, some literary evidence of disruption dating to the end of the 2nd century in the form of Maternus' Deserters War (Drinkwater 1983, 20), although archaeologically, this is invisible. The region experienced none of the disruption present in *Germania Inferior* with only a few towns, such as *Glanum* (Saint-Rémy-de-Provençe) being abandoned completely (Gagnière and Granier 1963a; Clébert 1970, 74-75). Despite this, many urban sites, such as *Arelate* (Arles) and Saint-Romain-en-Gal saw contractions and partial or sectoral abandonments (Leblanc and Savay-Gurrez 1996; Heijmans 1996; Heijmans 2004). Olive cultivation underwent, in some places, a significant contraction and a substantial number of smaller rural sites appear to have been abandoned at the beginning of the 3rd century (Brun and Congés 1996, 238-240). A second phase of agrarian crisis occurred in the second half of the 3rd century (Brun *et al*. 1989, 130) with evidence for further contraction of olive cultivation and processing. The second burst of contraction appears to have disproportionally affected larger rural settlements (Brun and Congés 1996, 241-246).

At the beginning of the 4th century, *Gallia Narbonensis* was reorganized as part of the larger reforms of the emperor Diocletian. This has been presumed to be the work of Constantius Chlorus, however, the date is unknown; all that can be said is that the new provincial structure was in place by the Verona List, compiled in 312 (Seeck 1876). A *vicarius*, based at Vienne, appears to have supervised Southern Gaul, the Alpine provinces and *Aquitania* as part of the Diocese of Vienne or the *Septem Provincinarum*, although some boundary revision appears to have occurred by the time of the *Notitia Dignitatum* (Bury 1923, 127-151; Jones 1954, 21-29). The diocese suffered slightly from the civil wars following the end of the tetrarchy, with Maximian choosing Arles and later Marseilles as his command headquarters (*Pan. Lat.* VI. 8-9; Lactantius, 29-30). The importance of Arles increased over the course of the early 4th century, especially under Constantine, who made it the *de facto* capital of Southern Gaul (Rivet 1988, 103-104). The region experienced relative calm through most of the 4th century, broken only by the usurpation of Magnentius at Autun, and his eventual defeat at Mont-Saléon (*Mons Seleucus*) in 353 (Sozomen, *Historia Ecclesiastica* 4.7.3).

Southern Gaul appears to have had a much lower priority to the central government from the middle of the 4th century onwards. This shift in priorities occurred despite the movement of the administrative and political infrastructure from Trier to Arles under Valentinian or Gratian in 388 (Heather 1995, 165-175) and the establishment of the *concilium septem provinciarum* in 418. The region appears to have been ignored by both Magnus Maximus during his 383 usurpation and Eugenius in 392 (Rivet 1988, 105). The crisis of the early 5th century did not immediately affect Southern Gaul, although the literary evidence points towards disruption in *Narbonensis* (Jerome, *Epistulae* 123, 15; Salvian, 6.12.2). Constantine III established himself at Arles in 408 and the diocese became something of a confused battleground between the usurper and the allies of Honorius until Constantine's eventual defeat at Arles in 411 (Rivet 1988, 106-107).

A second usurper, Jovinus, occupied *Narbonensis* in 412-413 at the same time that the Visigoths, led by Athaulf, captured Valence (Olympiodorus, *fragment* 16). The Goths captured a large part of the province and engaged the forces of the general Constantius as they moved into Northern Spain (Rivet 1988, 107), eventually coming to an accommodation with the imperial government and being settled around Toulouse, primarily in the province of *Novempopulana* (Schwarcz 2001, 15-29; Kulikowski 2001, 26-39). Despite the peace, the middle of the 5th century saw a number of attempts by the Goths to extend their territory to the east of the Diocese of Vienne, punctured only by their alliance with Aetius against the

Huns in the 450s (Rivet 1988, 107; King 1990, 201-205). At the same time, further groups of *foederati*, Alans near Valence and Burgundians in Savoy, were settled in the Diocese of Vienne by Aetius and his successors (Rivet 1988, 107). The cohesion of the area began to fragment as the Gothic king Euric and his successors extended their control over *Narbonensis* and *Viennensis*, eventually capturing Narbonne in 466 and controlling most of Provence (Sidonius, *Epistulae* VI.12; Wood 1992, 17). The region remained in the hands of the Visigoths until Clovis and the ascendant Frankish kingdom reduced their control to the coastal strip in the early 6th century. The Visigothic controlled remnant, now known as *Septimania*, was briefly conquered by the Umayyad Caliphate in the early 8th century before passing into the hands of the Carolingian empire in the 9th century (James 1980).

Northeastern Spain experienced a different trajectory during the Later Roman period. The region was a backwater for much of the period under study. Spain has traditionally been viewed as experiencing widespread damage during the 3rd century (Montenegro Duque *et al*. 1986; *cf*. Cepas Palanca 1997, 18-24) however, recent work has suggested that this is not the case (Kulikowski 2004, 65-70). Spain recognised the Gallic Empire sometime in the 260s; how much of the region remained loyal to the central regime is contested (Drinkwater 1987, 116), and it appears central control was restored before Aurelian's campaign in Gaul in 274. There is some literary evidence for a barbarian incursion that sacked Tarragona, although the sources are deeply confused and the archaeological evidence is non-existent (Kulikowski 2004, 68; Aurelius Victor, *De Caesaribus* 33.3). Northeastern Spain was reorganised as part of Diocletian's reforms, probably in the 290s (Barnes 1982, 225). The large Augustan province of *Tarraconensis* was truncated into three. The region under study retained the original name and provincial capital at Tarragona (*Tarraco*) but it was grouped with the other six Spanish provinces and the rump of *Mauretania Tingitania* under a *vicarius* based at Mérida (*Augusta Emerida*), although it appears the early *vicarii* may have been based in Africa (Lanata 1972; *cf.* Kulikowksi 2004, 72). The diocese was mostly demilitarised, with only a scattering of troops, mainly in the north and west (Pérez Garcia 2012), or in some way associated with the *Limes Mauretaniae*.

Relatively peaceful conditions ceased in the first half of the 5th century, with wars and unrest from 406 to 461 when the region passed out of Roman control. Spain superficially supported the usurper Constantine III (Orosius *Historia* 7.40.5), although there was a major rebellion by relatives of Honorius (Kulikowski 2004, 156) which were eventually put down by the general Gerontius. In 409, Gerontius himself revolted and set up a puppet emperor, Maximus who was based at Tarragona (Gurt Esparraguera and Godoy 2000, 426-428, 436). Gerontius enticed the barbarians who had crossed the Rhine in 406 to support him and ultimately much of the peninsular was settled by barbarian groups. Gerontius himself passed into Gaul and was defeated by the resurgent forces of Honorius in 411 (Burgess 1992, 243). Further usurpations by Heraclius and Jovinus played little part in *Hispania*, where much of the Spanish diocese was now in the hands of an ethnic assortment of 'Germanic' groups. *Tarraconensis* appears to have been spared significant barbarian settlement until it was absorbed by the growing Gothic polity in the late 5th century or later. Barcelona became the seat of Gothic government under Athaulf and Wallia (Prosper, *Epitoma chronicon*, 1257). The Goths were eventually paid by the central government to restore Roman rule in Iberia. The majority of Spain drifted out of Roman control during the course of the 5th century, with much of *Tarraconensis* plagued by groups of *Bacaudae*, poorly-understood groups of rebels or bandits (Sánchez León 1996), in the 440s. *Hispania*, including Eastern *Tarraconensis*, was held together within a recognisably Roman structure until the 450s, although it was overseen by the Gothic *foederati* of Theodoric II. After the death of Majorian in 461, Roman ability or inclination to intervene in the peninsular ceased abruptly (Kulikowski 2004, 190-193).

The Visigothic hegemony that followed it was inherently unstable. The region was politically fragmented with an ethnically divided legal system (Glick 1979, 28-29) and proved easy prey for first the Byzantines in the south, capitalising on a civil war (Thompson 1969, 325; Wood 2010, 293), and later the Umayyad Caliphate and its successors, although there is some degree of rural settlement continuity

until the 7th or 8th century. In the early 8th century, the region was rapidly incorporated into the new Umayyad Caliphate (Al-Ándalus) between 711 and 713 and remained under Muslim control into the 10th century in places, although Christian magnates and later the Carolingian Empire began to dominate the area from the late 8th century onwards (Chandler 2019, 54-57).

5.4 TRANSFORMATION ANALYSIS

This chapter primarily consists of an analysis of villa transformation in the southwestern side of the Diocese of the *Septem Provincae* and the northeastern corner of the Diocese of *Hispania*. This includes parts of the Late Roman provinces of *Narbonensis Prima* and *Viennensis* as well as the eastern part of *Tarraconensis*. This study region consists of 272 villa sites spread across the three provinces shown in figure 5.2. A high proportion of these, comprising 204 sites, display evidence of a Late Antique occupation phase and transformation in the Late Roman, Visigothic and Frankish periods.

A significant problem when assessing the scale and role of villa transformation in this region is the strong tradition of survey archaeology in the identification of villas (*cf.* Buffat 2009 for an introduction to the debate). This approach is particularly prevalent in Languedoc-Roussillon, where survey and small-scale excavation has composed a traditional part of investigation since the early 20th century (Mazauric 1909; 1910 for example) and forms a vibrant element to modern investigation (for example, Faveroy and Van der Leeuw 1998). This has left this study with a comparative lack of excavated sites in comparison to regions in Northwest Europe. Despite the fact that site interpretation is very different based on surface finds alone, the majority of the surveyed sites, especially those in the gazetteers of Buffat (2002; 2011) and Faveroy *et al.* (1994b) have relatively coherent chronologies and spatial layouts. These sites are too important to reject out of hand and consequently, those with clear dates and layouts have been integrated into this analysis.

5.4.1 GENERAL TRENDS

General trends of villa settlement in the Southern Gallic provinces and *Tarraconensis* show significant divergence from the data set of the northern provinces. The data presented in this section demonstrates the regional trajectory of long-term abandonment, reoccupation and transformation and illustrates the significance of the villa as a rural feature well beyond the formal end of Roman rule.

5.4.1A REGIONAL ABANDONMENT TRENDS

The villa and the villa system were long embedded into the social and economic system of Northeast *Hispania* and *Gallia Narbonensis* by Late Antiquity. Villas formed a key part of the rural landscape in Late Antiquity; however, the data points towards significant regional variation and a number of points can be raised when considering the long-term development of villa complexes on a regional level (figure 5.3).

Several elements are present in the development of occupation trajectories in the southern study zone. All three regions buck a common trend present in other regions in that they all experience long-term occupation at a selection of sites. In some cases, villa complexes are occupied long after the formal end of Roman control. All three provinces undergo long-term decreases in the total number of occupied villas from the 3rd century onwards. There is one important exception to this: the province of *Narbonensis Prima* experiences a sharper decline in the second half of the 3rd century and a recovery and plateauing of total numbers of occupied sites between the late 4th and mid-5th centuries. This recovery is not

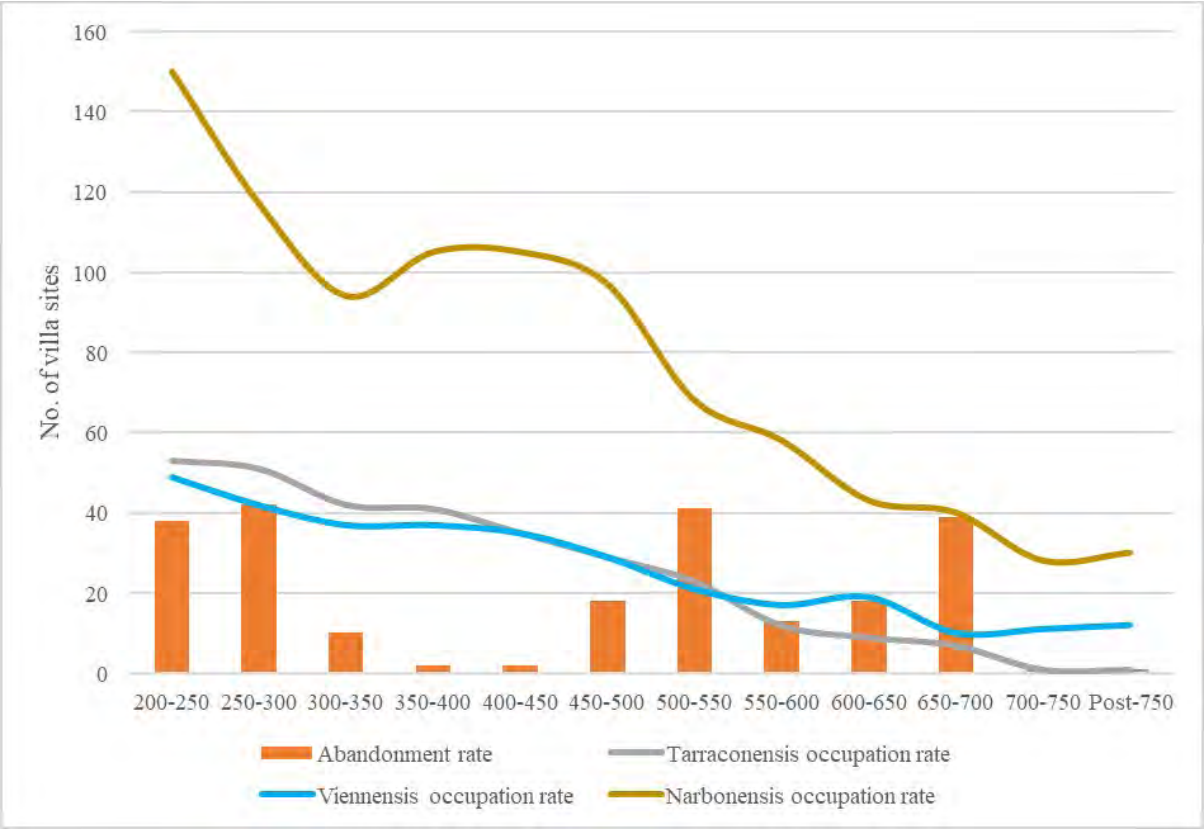

Fig. 5.3: The Late Roman villa abandonment curve set against the provincial occupation rates for villas, where data is available (J. Dodd) (n = 243).

matched elsewhere in the region. *Tarraconensis* experiences consistent decline with a series of 7th-century 'crashes' whilst there is a near imperceptible hint of stabilisation in *Viennensis*. This likely reflect factors in *Narbonensis Prima* that are not present south of the Pyrenees and do not appear in *Viennensis* simply due to the lack of total provincial coverage. Despite the evidence for declines in occupation density, evidence indicates that agricultural production reached its maximum capacity during the 5th century (Lewit 1991, 85-88; Mauné 1998 135-152). Although the dating resolution is relatively unclear in some regions, this data set points towards all three regions experiencing significant 'crashes' in total number of villas occupied from the early 7th century onwards.

Both Southern Gallic provinces also experience a somewhat bizarre increase in reoccupation in the 8th century. These occupation phases are often unconnected to the villa complexes themselves and represent the imposition of new medieval settlement structures and landscapes without a clear link to the Roman past. However, the development of this new landscape is difficult to reconstruct and may be tied to the long-term use of focal points in the larger rural centres (for example, Schneider 2002, 34-38 and Raynaud 2002, 50-53), something well beyond the scope of this study. Northeast *Tarraconensis* instead demonstrates a long slow decline in villa occupation rates with the final occupation at villa sites dating to the late 7th and early 8th centuries, possibly due to the increasing political instability in the Visigothic kingdom. Although there is some long-term occupation, it is generally concentrated in the *Ager Tarraconensis* and there is nothing like the presence of *longue durée* sites visible in *Narbonensis Prima* and *Viennensis*.

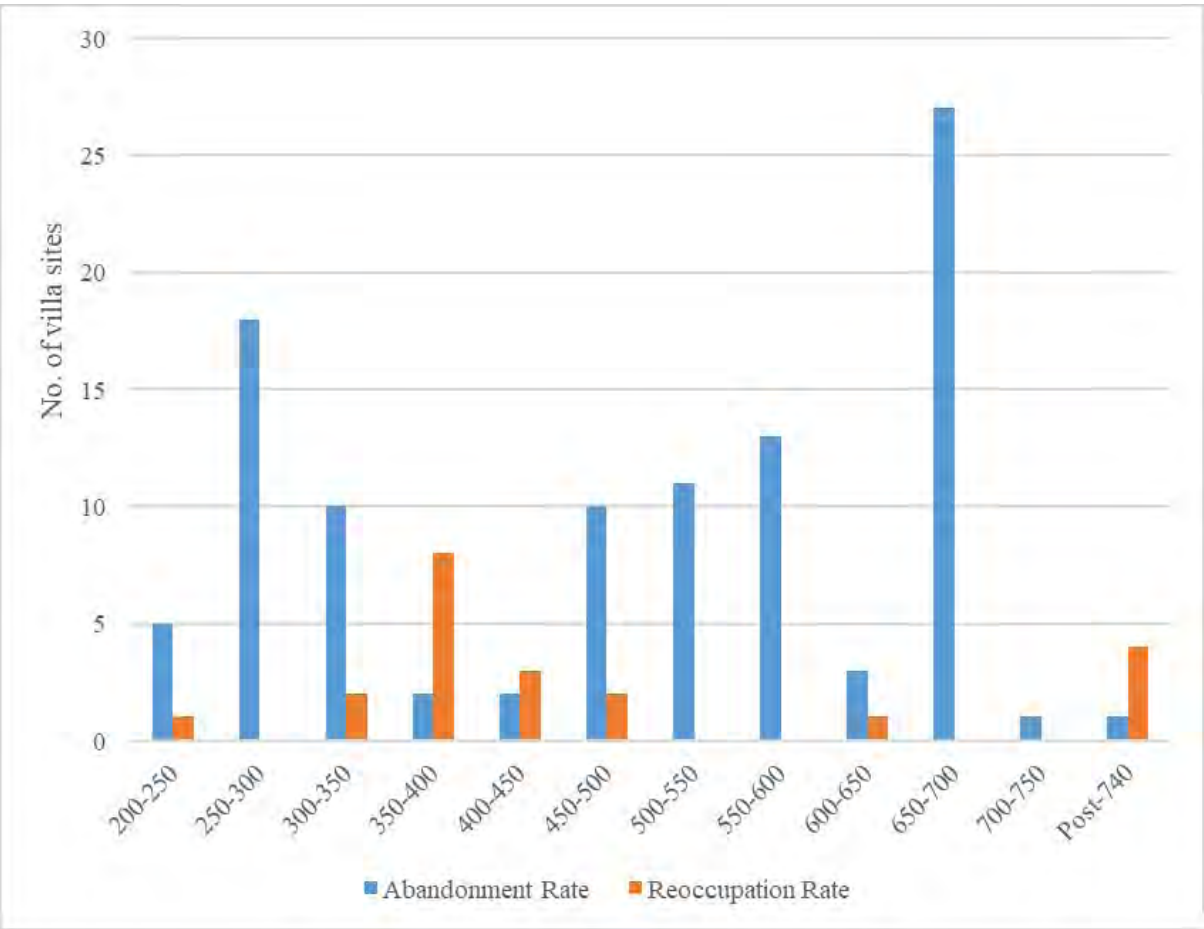

Fig. 5.4: A breakdown of villa sites by end of primary use phase and start of secondary use phase at those sites where data is available in *Narbonensis* and *Tarraconensis* (J. Dodd) (*n*=109).

5.4.1B REGIONAL REOCCUPATION TRENDS

Reoccupation is a comparatively unimportant phenomenon in *Tarraconensis* and *Gallia Narbonensis*. The majority of sites experienced continuity of occupation until their final abandonment phases (figure 5.4). Reoccupation in the southern study region presents a single period of moderate intensity in the second half of the 4th century with a low-level group of isolated anomalies spread across the late 4th and 5th centuries displaying secondary occupation phases. The low-level of reoccupation present in the data, coupled with the *longue durée* occupation of sites demonstrated in figure 5.3, indicates there was a high level of socio-economic continuity at villa sites. The lack of severe periods of turnover in the occupation of villa complexes is important to note and indicates several things. Firstly, there appear to be high levels of stability built into the rural settlement hierarchy in both *Tarraconensis* and *Gallia Narbonensis* (for the Bitterois, see Buffat 2011, 102). The second point to note is that villa complexes were not significantly influenced by a 'Germanic' resettlement phase after the end of primary occupation trajectories at individual sites, as is observed in other regions in this study.

5.4.1C REGIONAL TRANSFORMATION TRENDS

Transformation plays an important role in the Late Antique landscapes of Northeast *Tarraconensis* and Southern Gaul. Villa transformation is most widespread in the second half of the 4th century (figure 5.5).

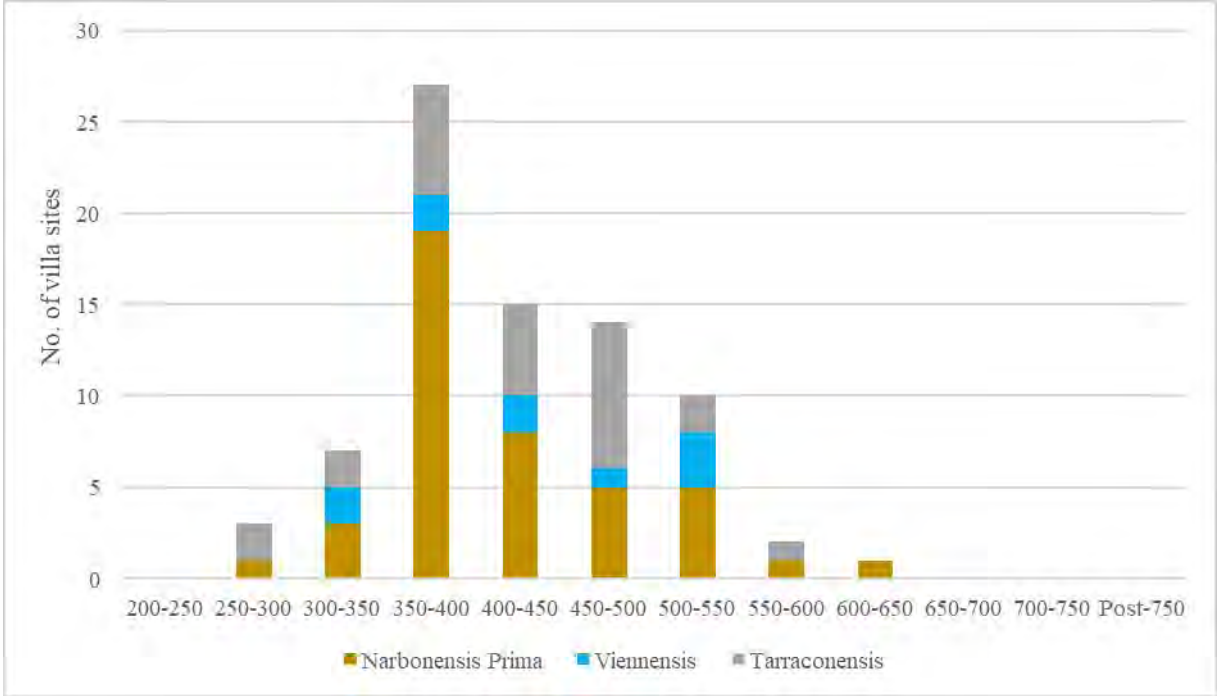

Fig. 5.5: A breakdown of the first appearance of transformed occupation at villa sites where data is available in *Narbonensis* and *Tarraconensis* (J. Dodd) (*n*=81).

Widespread transformation appears to develop very rapidly without any significant 3rd or 4th century build-up. The huge increase in transformation from the early to late 4th century is completed by a higher rate of transforming sites from the 5th century onwards. This period of transformation continues to decrease until the early 6th century, at which point there is little evidence for sites entering new transformational trajectories. The small group of sites that do undergo a pre-4th century transformation phase are not well studied and it has been suggested that these sites related to changing patterns of landholding, namely the nucleation of settlements and the consolidation of larger villa landholders (Chavarría 1996; 2004).

These developments are not matched by an overall increase in transformation following the political end of the Roman hegemony in the middle of the 5th century. There is some evidence of variations between the provinces, for example, there is an increase in transformation in Northeast *Tarraconensis* in the period following the formal end of Roman rule, however, divergence only occurs in the second half of the 5th century. This points towards increasing differences in the role of the villa between *Gallia Narbonensis* and Northeast *Tarraconensis* after the end of Roman political control. It also indicates that some regions may have experienced a stabilisation in settlement dynamics. Northeast *Tarraconensis* experiences a dramatic collapse in the appearance of new transformed contexts from the early 6th century onwards. This would suggest that elements of the social and economic networks were restored, perhaps in the case of Spain, related to the imposition of the new Visigothic state.

5.4.4 HABITATIONAL TRANSFORMATION

As is the case in all study regions, simple habitational change is the dominant form of transformation in Late Roman villas in this region. A selection of 50 sites throughout the region show evidence of habitational transformation. Morphologically, this includes a wide range of activities, from simple habitational

layers or installed hearths within buildings to elaborate domestic arrangements. It also includes a small and select group of sites with new timber styles and designs.

5.4.4a HABITATIONAL MORPHOLOGY

Morphologically, there is comparatively little variation in habitational transformation across *Gallia Narbonensis* and Northeastern *Tarraconensis*. Primarily this takes the form of 'messy' occupation in existing structures with changes to the physical fabric of the villa taking priority over new constructions (figure 5.7). Architecturally, new wooden constructions such as post-built structures and *Grubenhäuser*, generally referred to as *cabañas* in Spanish and Catalan, are rare. Very few sites, for example Gruissan– Saint-Martin-le-Bas and Vilauba, display any evidence of this form of habitational morphology. Instead, the majority of sites experience a transformational trajectory related to the use and conversion of existing villa buildings. This domination is illustrated in table 5.1, which shows that only 22% of sites demonstrate evidence of new wooden constructions.

site type	number of sites
Evidence of wooden constructions	11
Changes primarily to existing structures	28
Unknown	11

Table 5.1: A breakdown of habitational transformation at villa sites by type of occupation (J. Dodd).

a) Alteration and renovation

The primary driver for habitational transformation in the southern study region is the alteration, renovation, or conversion of existing structures. Morphologically, this includes a huge variety of forms and styles of occupation. Functional alterations are the most common with mosaics replaced by earth floors, for example at El Romeral, and subdivision of rooms and galleries, for example at Aspiran–St. Bezard/ Dourbie (figure 5.19) and La Ramière (figure 5.6). There is evidence for the demolition of high-status elements such as mosaics, for example at Torre Llauder (Ribas 1963), where a classical decorative pattern appears to have been repaired with a badly executed geometric pattern and lime slurry mix.

The domination of building reuse and alteration is not spatially limited to either the *pars urbana* or *pars rustica*. There appears to be a wide variety of different micro-spatial foci at different sites. Ancillary buildings are a key part of this with evidence across the region for the renovation and development of former productive buildings in the *pars rustica*. This is illustrated by the villa at Béziers - La Courondelle (BSR 2008, 123-125): the *pars rustica* underwent an abandonment period in the 3rd century, in-line with the known collapse of oil production. The site was reoccupied in the early 5th century with a central building renovated. This structure is poorly recorded but seems to have been acted as the focal point for occupation from the 5th to early 7th centuries *in lieu* of the now abandoned *pars urbana*.

The majority of transformation is concentrated within existing structures rather than in new buildings and it is present in all three studied provinces (figure 5.7). Renovation or reoccupation comprises 56% of the total number of habitational sites, although this number is somewhat statistically damped due to the large percentage of unknown sites (table 5.1). The level of reuse is high, especially when considering that many of the sites demonstrating new constructions also have significant alteration and reuse phases.

Assessing the use of existing buildings for habitational change is difficult beyond simple identification and description. Shifting internal arrangements and alterations are generally not associated with a demonstrable change in material culture. Transformational horizons are associated with a range of ceramic forms in a Late Antique tradition. These include 'continuity' ceramics such as *Dérivées des sigillées*

Fig. 5.6: New internal arrangements in the *pars rustica* of the villa at La Ramière. A 5th century wall (highlighted in red) cutting across a 2nd century *defrutarium* (adapted after Petoit in Pomarèdes and Petitot 1996, fig. 3, 10).

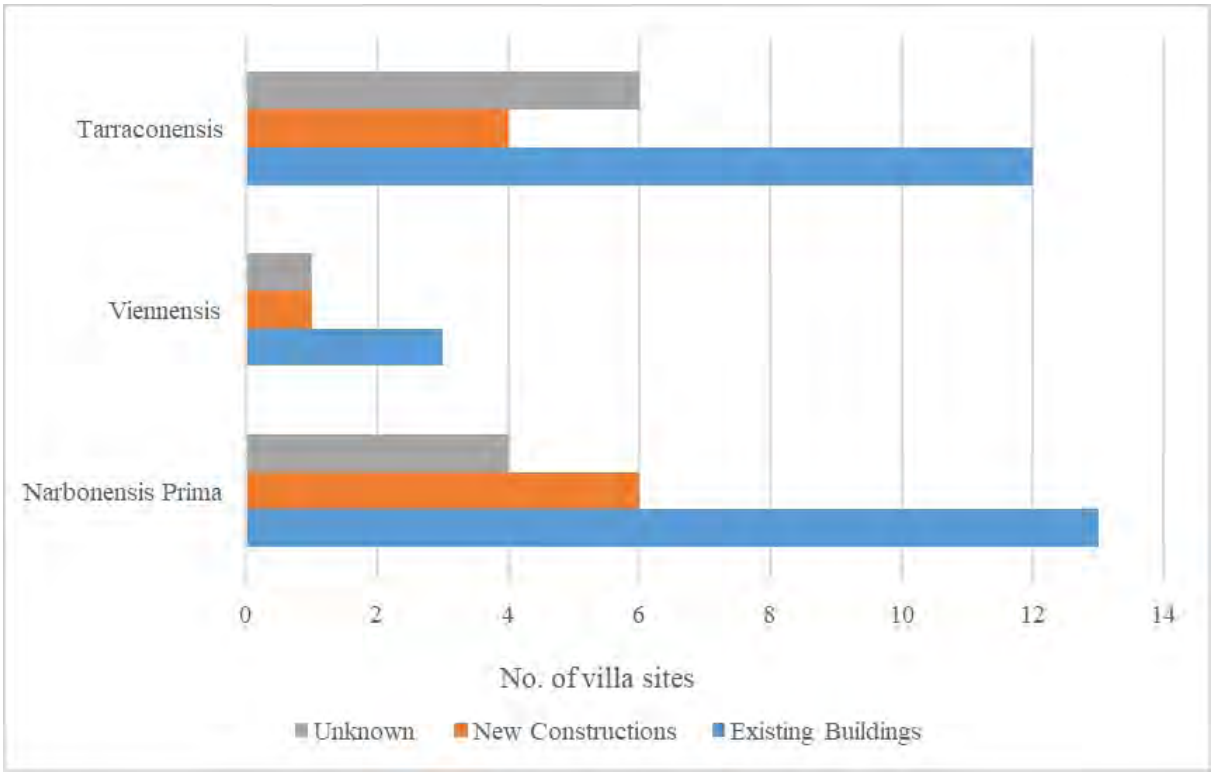

Fig. 5.7: Breakdown of habitational transformation at villa sites by type of occupation and province (*n*=50) (J. Dodd).

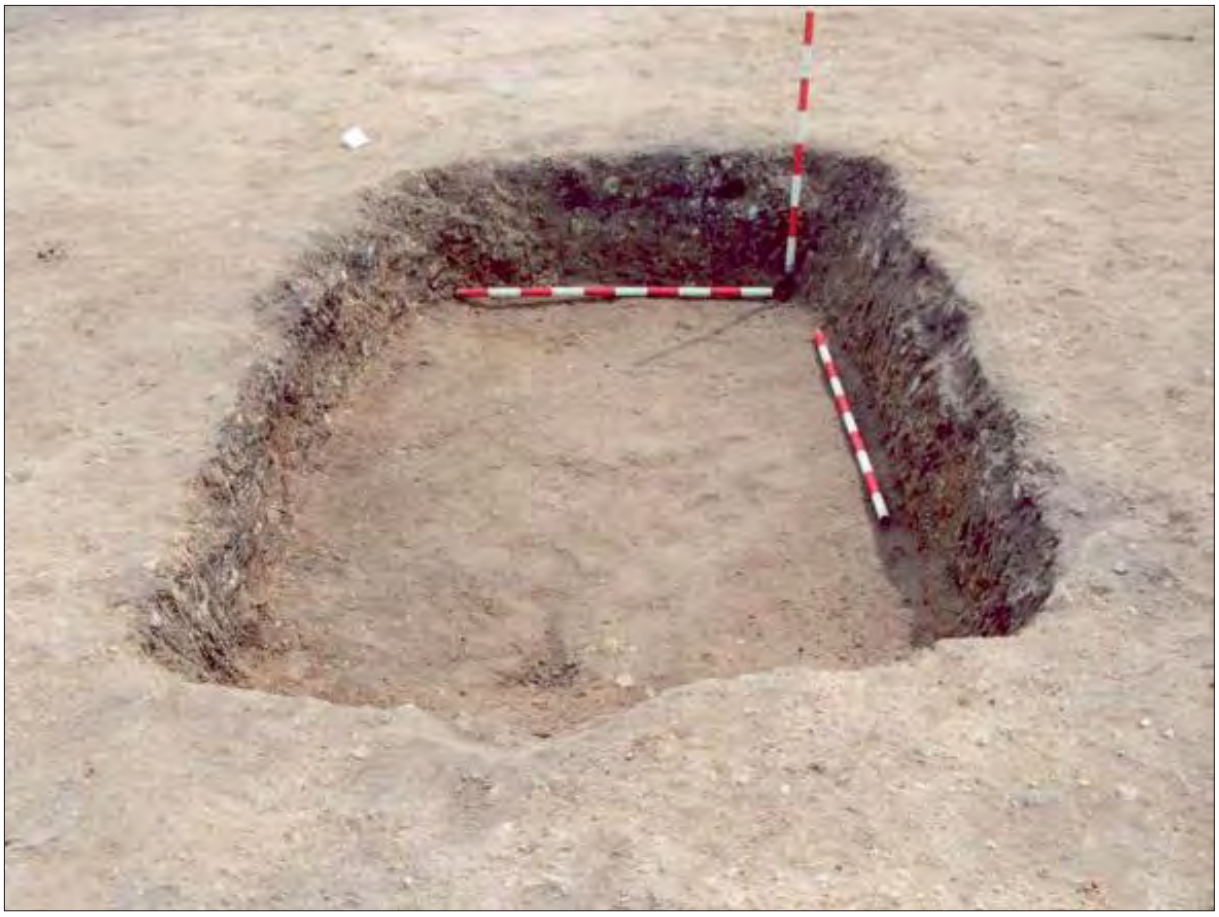

Fig. 5.8: New building styles: An example of a well-excavated Early Medieval *cabañas/Grubenhaus* from outside the study area. This example was excavated at La Mata del Palomar in the upper Douro basin (STRATO, 2002).

paléochrétiennes (DSP) (Rigior and Rivet 1985; Raynaud 1993) and a range of later forms of *terra sigillata* as well as local imitations. The presence of long-term traditions in Late Antique ceramics points towards social continuity at villa sites in the region.

The presence of this material culture indicates that trade and consumption patterns were still in place during Late Antiquity with rural populations seeking or producing ceramics within a very 'Roman' tradition. When combined with the survival or alteration of villa buildings, it is suggestive of a rural population with deeply ingrained thought-processes regarding landholding and consumption patterns. The adherence to the use of older structures is also indicative of the survival of traditional forms of social expression. This is further supported by the lack of the widespread adoption of new wooden 'Germanic' building styles and suggests that the remains of Visigothic influence in rural areas on the Catalan coast and *Gallia Narbonensis* were ephemeral, at least in an archaeological way; a topic further explored in 5.4.4c.

b) Wooden constructions

Wooden constructions are not common across *Gallia Narbonensis* and Northeast *Tarraconensis*. A small group of sites display evidence of wooden buildings and these consist of a diverse series of forms, styles and morphologies. A minority of 22% of sites display some form of wooden construction and in many cases, they are connected or related to continued use of older structures for habitational purposes. In a small number of cases, wooden structures comprise the last occupation phases at villa complexes. This group primarily dates to the 6th and 7th centuries. Overall, this is a disparate group of sites, most of which are difficult to describe and difficult to qualify.

Fig. 5.9: An example of new styles of construction at a villa site: Two phases of SFBs at Gruissan – Saint-Martin le Bas (Dodd, adapted after BSR 2012, 32-35).

The most important of these features is the *cabañas/fond de cabane*. These terms are nuanced, however usually refer to a form of Sunken-Feature Building (SFB) consisting of a pit-like feature and presumed wooden or thatched walling and roofing (figure 5.8; figure 5.9) but equally has been used to describe poorly built stone constructions, similar to the French phrase *habitats sommaires*. This makes it difficult to assess the true description of a building without seeing the often-unavailable plans and photos in the case of almost all sites in the study region. Where identification is possible, these structures have been related to the type of wooden, generally Late Antique or Early Medieval structures called *Grubenhäuser* in Northern Europe. Some work has been done to assess this; however, it has generally focused on micro-regions with good data (Vigil-Escalera Guirado 2000; Quirós Castillo, 2011; Tejerizo 2012), predominantly outside the scope of this study. The poor understanding of these features in *Tarraconensis* and Southern Gaul is due to a lack of a significant survey of these buildings; however, utilising the available data does indicate that there is a distinct lack of SFBs in these zones in comparison to Northern Europe.

A diverse group of other wooden buildings does appear within the data set. These structures are somewhat diverse; encompassing a range of buildings referred to as Post-Built Structures (PBS) and includes large halls reminiscent of Wijster-type longhouses, for example at St. André-de-Codols (figure 5.11) as well as more esoteric circular and square buildings. This form of wooden structure is generally limited to the 4th or early 5th centuries and seems to be part of a different tradition to the use of *cabañas/Grubenhäuser*. They are often related to combined productive and habitational structures, although in many cases, there is little published information on them.

Spatially, wooden structures are spread equally across the region (figure 5.10). There is no significant evidence of clustering or nucleation beyond a slightly higher total number in *Gallia Narbonensis* than Northeast *Tarraconensis*, however, this is likely due to collection bias. This lack of significant clusters is

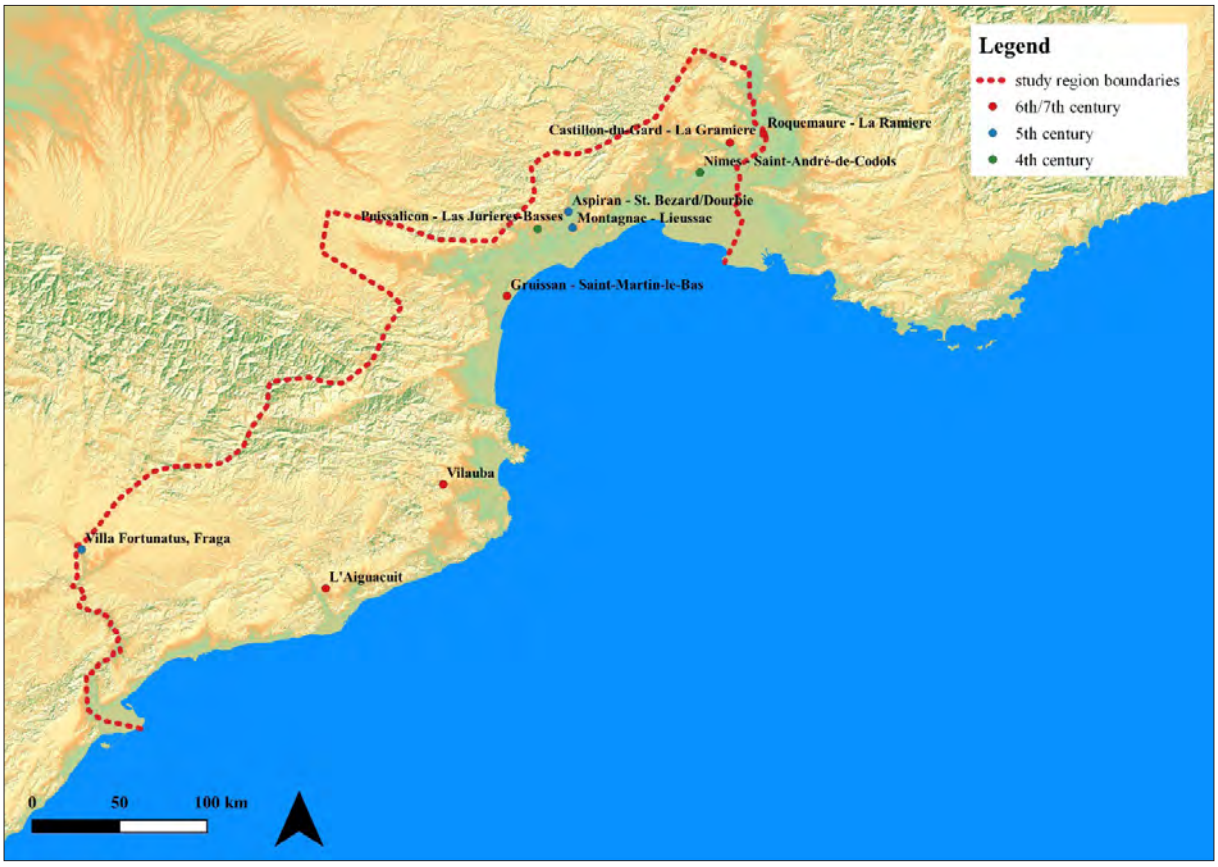

Fig. 5.10: Temporal spread of timber buildings on (former) villa terrains where evidence is available during the Late Roman period in Northeast Tarraconensis and Gallia Narbonensis (J. Dodd).

further reinforced by the temporal distribution of these sites. There is little or no evidence for a spread of sites developing from one region to another. Wooden constructions develop relatively evenly from the late 4th into the early 5th century. A total of 2 sites date to the second half of the 4th century. These villas, both located in *Gallia Narbonensis*, display evidence of SFBs at Puissalicon - Las Jurieres-Basses (BSR 1996, 132) and Post-Built Structures at St. André-de-Codols (Pomarèdes *et al.* 2012; figure 5.11). The wooden phases at both these settlements appear to be occupied in tandem with the existing stone-built fabric of the sites. The key example of this, the well-excavated site at St. André-de-Codols (Pomarèdes *et al.* 2012; figure 5.11), is worth more attention. The villa entered a transformational trajectory in the late 4th century with new internal arrangements, graves, hearths, and pits in the corridors of the main house, as well as an industrial press in the southeast corner. In parallel to this development, a new large PBS building was erected on a different alignment north of the main building façade and seems to have been used for habitational purposes.

St. André-de-Codols is the only well-excavated and published villa with a wooden construction phase from the region. The site has long served as an exemplar for shifting habitational structures, being cited in wider studies (Lewit 2001, 261) as evidence for this change. Despite its perceived importance in the wider literature, the evidence laid out in figure 5.10 would suggest that in reality, the site is more unique than previously suggested. The relatively widespread but infrequent nature of wooden constructions in the southern provinces is perhaps indicative of more traditional forms of rural community and points towards the region exhibiting 'traditional' Roman occupation, even if this was in a new style. The long continuity of habitational use of the villa fabric into the 7th century suggests that there was a degree of socio-economic cohesion in the rural economy, reflected in the social and economic stability provided by the Visigothic state.

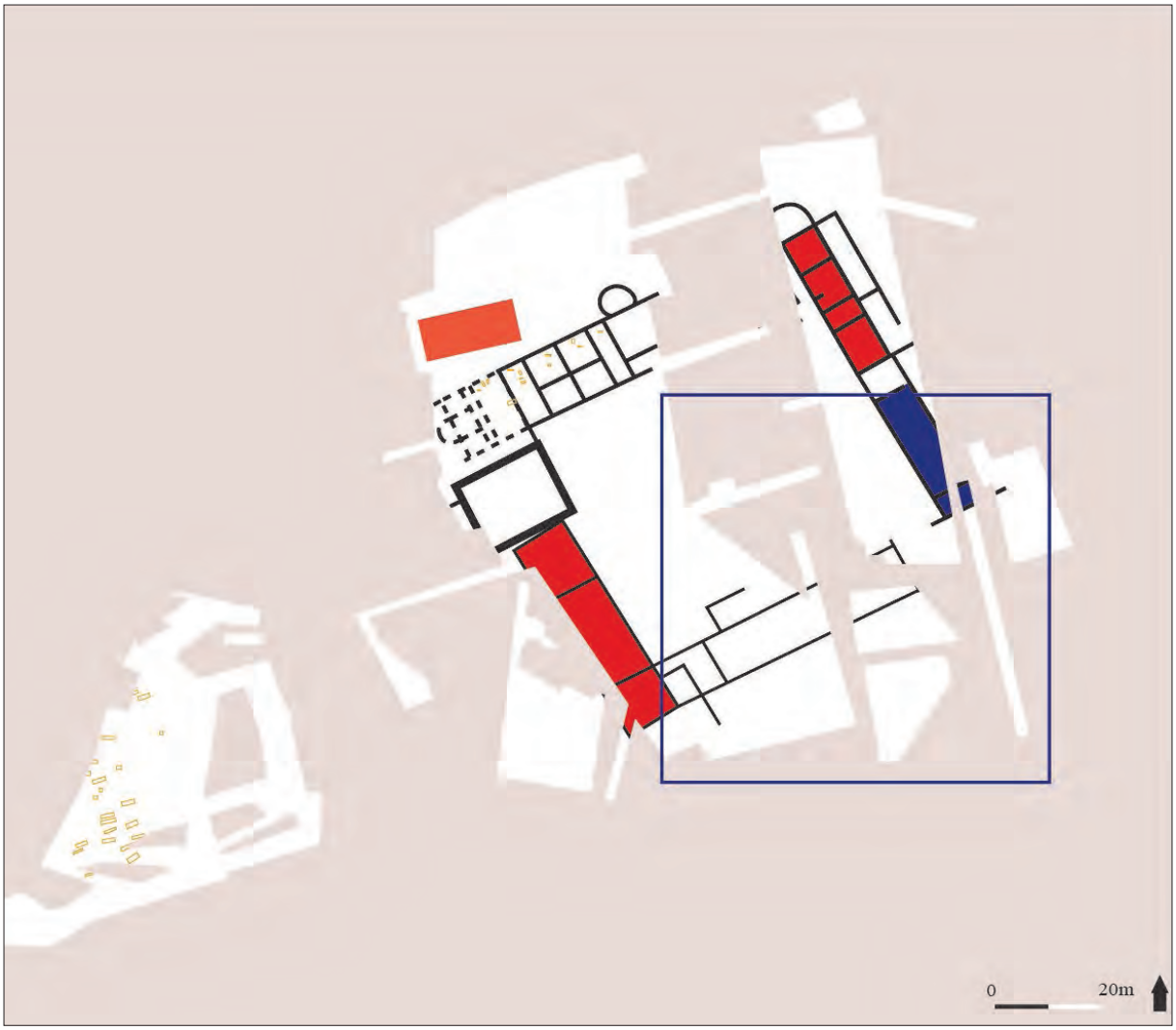

Fig. 5.11: A Post-Built Structure in a transforming villa context: A long 5th-6th century hall-like building (highlighted in light red) north of the main villa building at St. André-de-Codols (Dodd, adapted after Pellecuer and Pomèrades 2001, fig. 5, 54).

5.4.4B DISTRIBUTION AND DENSITY

Spatially, habitational change is present across all three provinces and landscape zones (figure 5.12), however, there is a likely over-representation in density towards the highly developed villa landscapes of the littoral zones of *Tarraconensis* and *Narbonensis*. This bias reflects both the distribution of sites, which is naturally focused on the littoral zone, and an excavation bias as most development and therefore archaeological investigation has taken place here. The littoral zone also includes the large socio-economic centres of Nîmes and Béziers, where developed cadastral systems and villa landscapes were located (Mauné 1998; Buffat 2011).

Three major clusters of habitational change are notable in the data set. Firstly, a dense group of sites in the *Ager Tarraconensis*, secondly, a more dispersed group between the Étang de Thau, Narbonne and Béziers, and finally a second dispersed group in the *territorium* of Nîmes. These clusters, visible in figure 5.12, are located in the surroundings of the three major administrative and territorial centres of Late Antiquity: Nîmes, Béziers and Tarragona. Notably there is little or no evidence for a similar nucleation of habitational transformation around Barcelona, a relatively important Late Antique centre. This pattern

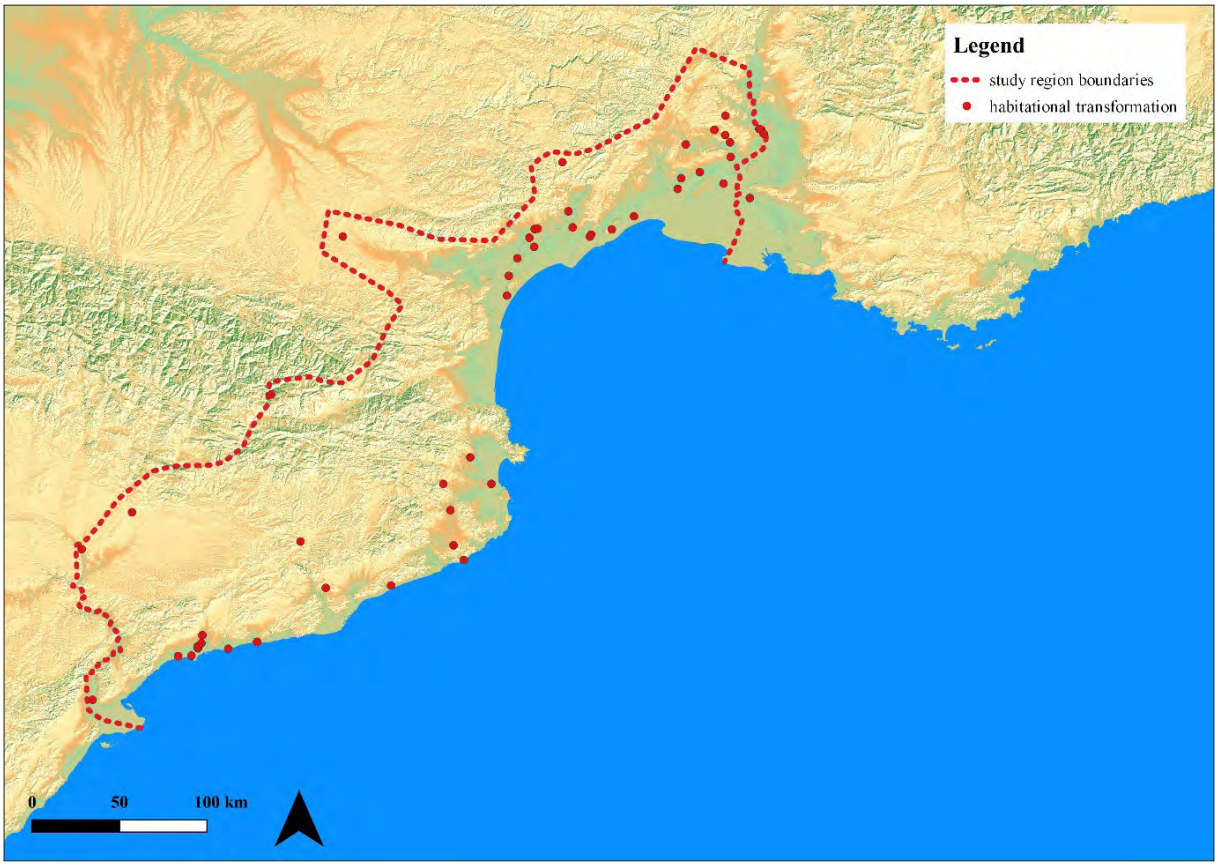

Fig. 5.12: The distribution of habitational transformation at villa sites in the southern provinces in the Late Roman Period (J. Dodd).

is repeated in the surroundings of smaller urban centres and *agglomerations secondaires*, especially in *Gallia Narbonensis*, for example Château-Rousillion.

This distribution appears to confirm the link between surviving villa sites and urban centres in the region. It points towards an important connection between continuity and change in rural sites and their proximity to Late Antique cities. This link would suggest that habitational change at villa sites in this region was influenced by specific impulses from the cities. Unfortunately, our understanding of *transformación* in Spanish cities is poor, especially in Tarragona (*cf.* Arce *et al.* 2007 for a summary), so little more can be said about this.

There is little evidence for a simple linear development in the nature of habitational transformation in Southern Europe. It does not appear to consist of a decreasing spread of habitational transformation at a site level, as was the expected case of affairs (figure 5.13). Instead, it appears that transforming contexts are most prevalent at a moderate level of use (use of 4-5 rooms) rather than overwhelmingly small-scale or large-scale use of sites with 54% of sites in this bracket. Despite the universal presence of habitational transformation across the study region, there is an important degree of variation between the provinces under study. Both *Tarraconensis* and *Narbonensis Prima* are dominated by a relatively intense peak of moderate levels of transforming contexts. In contrast, habitational change in *Viennensis* is limited to a smaller number of transforming contexts with no appreciable peak in either category. This indicates one of two things: firstly, collection bias in *Viennensis* has skewed the results. The province was only partially studied, and the selective nature of collection may be influencing the data. Secondly, it is possible that *Viennensis* may be tied into a larger zone of habitational patterns that bear more of a similarity to the situation in Central and Northern Gaul although this is conjectural within the confines of this study. Several larger

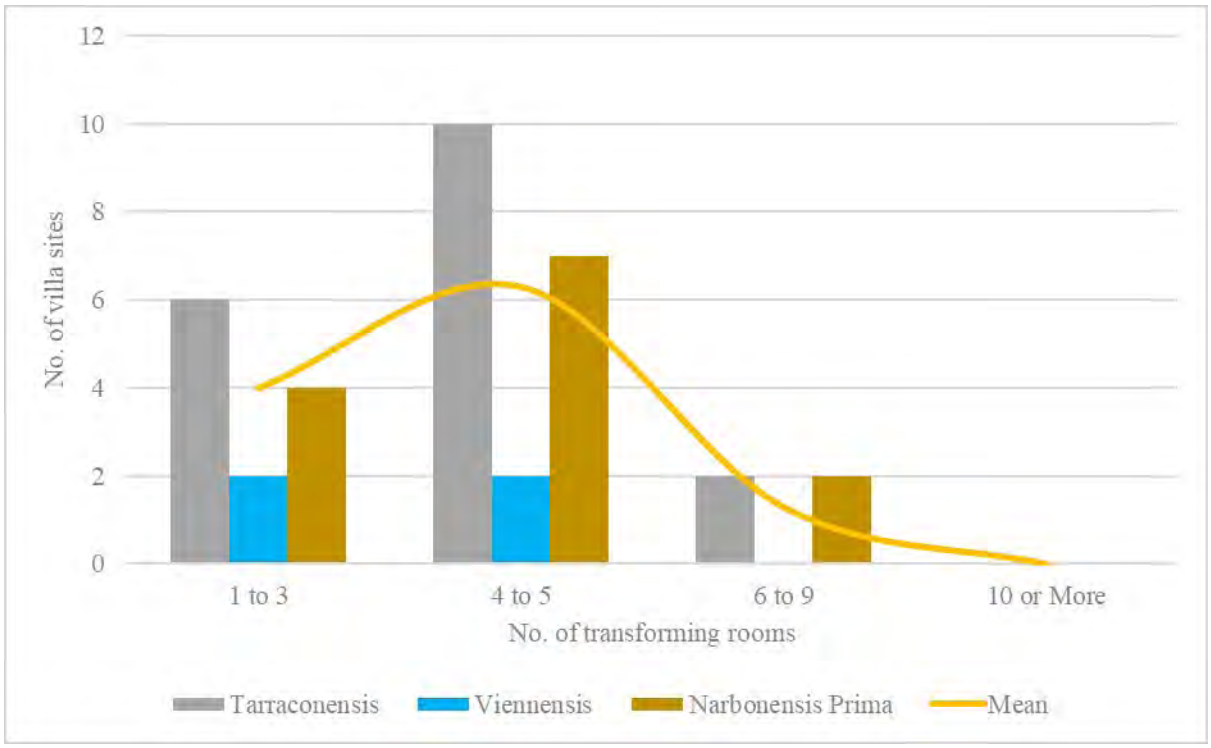

Fig. 5.13: Density of habitational transformation at individual villa sites by province measured by number of transforming rooms (*n*=35) (J. Dodd).

sites are present in the data set. These larger transforming sites, such as St. André-de-Codols (Pomarèdes *et al*. 2012) and Vilauba (Castanyer and Tremoleda 1999) are widespread and do not appear to demonstrate a clear pattern.

The data laid out in figure 5.13 points towards a transforming landscape dominated by a broad tier of moderately large sites and a relatively equal balance between transforming villa complexes in the landscape. Smaller sites are present; however, their influence is somewhat limited. Equally, there are few larger transforming nodes and large villa complexes do not appear to have played an important role in the changing nature of society. This suggests that villas were not acting as dominant nodes within the landscape and this role was played by the numerous *agglomerations secondaires* and small towns that were active into the post-Roman period with villas playing a subsidiary role in the development of larger communities and new social groups.

5.4.4c TEMPORAL PATTERNS

Temporally, the pattern of first appearance of Late Antique villa habitational transformation mirrors the general transformation distributions laid out in figure 5.5. Two major spikes are present in the data set: the first dating to the second half of the 4th century and the second to the first half of the 6th century (figure 5.14). Despite this neat narrative, there are significant differences between the three provinces.

The first spike in intensity dates to the period 350-400 and is dominated by sites in *Narbonensis Prima*. *Narbonensis Prima* experiences a slow decrease in the intensity of transformation appearances until the late 5th century, at which point new appearances abruptly cease. Notably, this peak of transformation is not complemented by a similar trajectory in Northeast *Tarraconensis*, where a slightly later peak is observed. *Tarraconensis* experiences two separate but linked periods of intensity: firstly, in the first half of

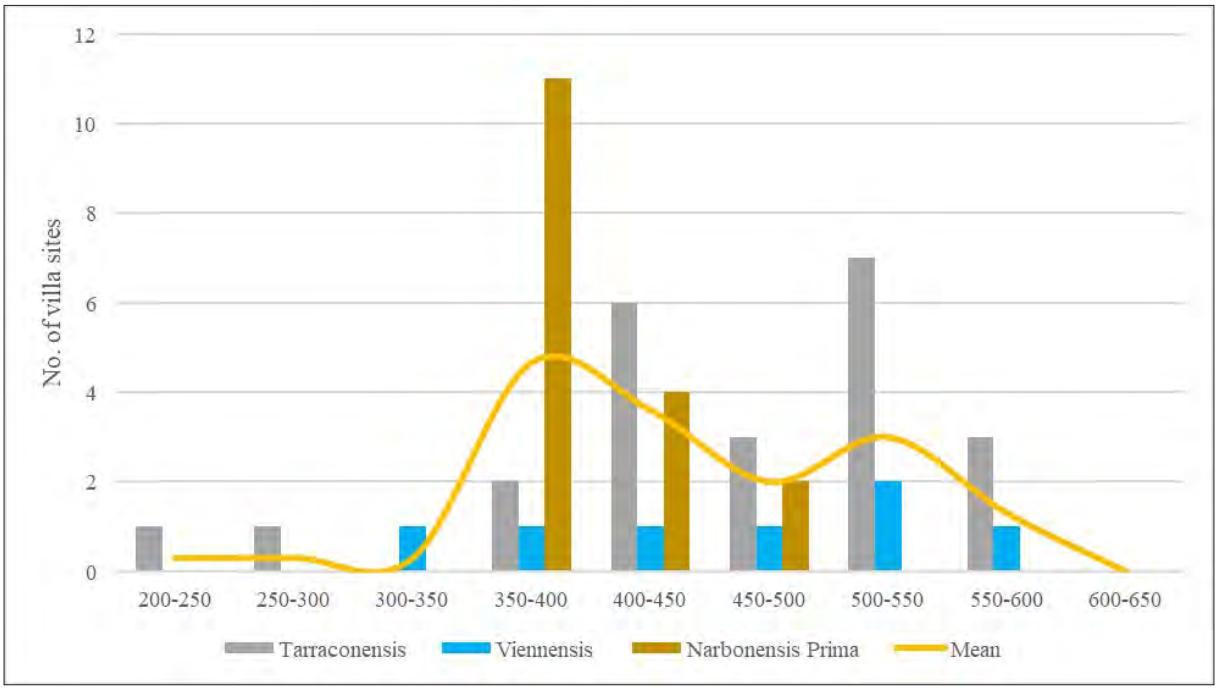

Fig. 5.14: First appearance dates for habitational transformation where data is available expressed as quantity of sites set against a regional average of habitational transformation appearance (*n*=47) (J. Dodd).

the 5th century, and secondly, a more intense peak in the first half of the 6th century. The 5th century peak indicates that the factors affecting *Narbonensis Prima* in the late 4th century may have also been felt in *Tarraconensis*, albeit with a time lag, leading to a *c.* 50-year gap between widespread appearances of the phenomenon in the respective provinces. *Viennensis* displays a different trajectory, with a consistent low-level rate of change beginning in the second half of the 3rd century and continuing until the second half of the 6th century. The complex group of peaks and troughs between 350 and 450 is complemented by a second spike in intensity in the first half of the 6th century. This peak is almost totally borne out in *Tarraconensis* with a stable decline in *Narbonensis Prima* and no presence in *Viennensis*. This second peak takes place following the end of Roman rule and it can be interpreted simply as a time lag in rural occupation patterns reacting to the withdrawal of an overarching political structure.

The interaction between the two dominant provinces of *Tarraconensis* and *Narbonensis Prima* is curious and difficult to explain. It could conceivably point towards the spreading of the phenomenon of change from Gaul to Spain, however, the presence of very early habitational transformation in *Tarraconensis*, albeit in small numbers, would suggest otherwise. This early transformation has been noted all along the east coast of Spain and has been tied to the consolidation of larger sites at the expense of smaller villas (Chavarría 1996; 2004; 2007).

5.4.4D DISCUSSION

Habitational transformation in the southern provinces provides a surprising mixed picture. Although new wooden constructions are present in 22% of sampled sites (table 5.1), there is little evidence for either overwhelming adoption of new building styles or a recognisable pattern to their appearance. Generally, there is no clear-cut relationship between these wooden buildings and new 'Germanic'-style populations moving into the region in the 5th century. The exception to this general rule are the Sunken Feature

Buildings identified as *cabañas* and morphologically similar to *Grubenhäuser*. This relationship is complex, partly as wooden features on the Catalan coast have never been identified or seriously investigated. In other regions, typological sequences have identified at least some of these features as dating to the Migration Period (Vigil-Escalera Guirado 2000; Quirós Castillo, 2011; Tejerizo 2012). The archaeological evidence suggests that a number of buildings traditionally identified as these *cabañas* actually date from a wide range of periods with only a small fraction associated with Migration Period settlement (Vigil-Escalera Guirado 2000). In response to this, a detailed study of *cabañas* in *Tarraconensis* is required to support assertions on migration in the region. The lack of associated material culture in a large number of these buildings suggests that new styles may not be immediately connectable with Visigothic settlement, but rather are part of a longer tradition of Iberian architecture, although that is not to say that none of these structures date from the Early Medieval Period. Some features in this data set, for example at Vilauba (Castanyer and Tremoleda 2006), do display overt evidence of Visigothic *ceramique gris* or lyriform buckles (figure 5.27) and can be dated to the Migration Period, however, the majority are devoid of any 'Germanic'-style finds. This raises questions of Visigothic settlement in Northeast *Tarraconensis* and goes someway to supporting the traditional assertion that 'Germanic' populations were settling in other regions, for example the Central Spanish Meseta (see 5.4.3c for a further exploration of this) and bypassing the Catalan coast and Southern Gaul entirely. This suggests that both Southern Gaul and the Catalan coast were of a low priority to new populations moving into the regions. This perhaps indicates that settlement in Spain and Southern Gaul was not dictated by sites of Roman rural power but rather by factors currently outside our understanding.

Instead, the data points towards new styles developing organically within the villa buildings. This suggests, at some level, a rejection of Romanised occupation. New earth floors, hearths and occupation debris are present and have traditionally been interpreted as 'squatters' in Iberian literature, a practice that continues to this day. Archaeologically, this assertion must be tempered by the indications that these sites were tied into the wider connectivity of the Mediterranean. Many of these sites display evidence of far-reaching ceramic imports with *terra sigillata clara* and African Red Slipped Ware (ARS) reaching villa sites in considerable quantities and appearing in transforming deposits. This appears to have supported continued occupation at villa sites into the 6th century, allowing social capital and a continued elite presence at rural sites until the major disruptions to trade flows and networks from Justinian's Vandal War and the upheaval of the Late Visigothic and Early Islamic periods.

Previous studies (*cf.* Ripoll and Arce 2000; Lewit 2003; Chavarría 2007) have generally marginalised regional studies in this area to focus on a wider and more selective sampling method. This has concentrated on the few examples of PBS and SFB constructions in the region and highlighted their presence above all else. When considering habitational change on a more holistic level, it is clear that these studies do not stand up to scrutiny. Contrary to the impressions made by less data-driven studies, it is clear that wooden buildings played a marginal role in the 5th and 6th century development of the rural landscape. Wooden buildings and new styles of construction are not a widespread phenomenon in the transformation of the villa landscape in Northeast *Tarraconensis* and *Gallia Narbonensis*.

5.4.5 PRODUCTIVE TRANSFORMATION

Productive transformation, the conversion of buildings for economic activities, is a key element of change in the villas of Southern Gaul and Northeastern *Tarraconensis*. It is common at a wide variety of site classes across the region and plays a role both in urban centres (Heijmans 2004) and *agglomerations secondaires* (see Fiches 2003). Rural settlements are no different, with 42 sites in this data set displaying overt evidence of conversion from residential to artisan or industrial purposes.

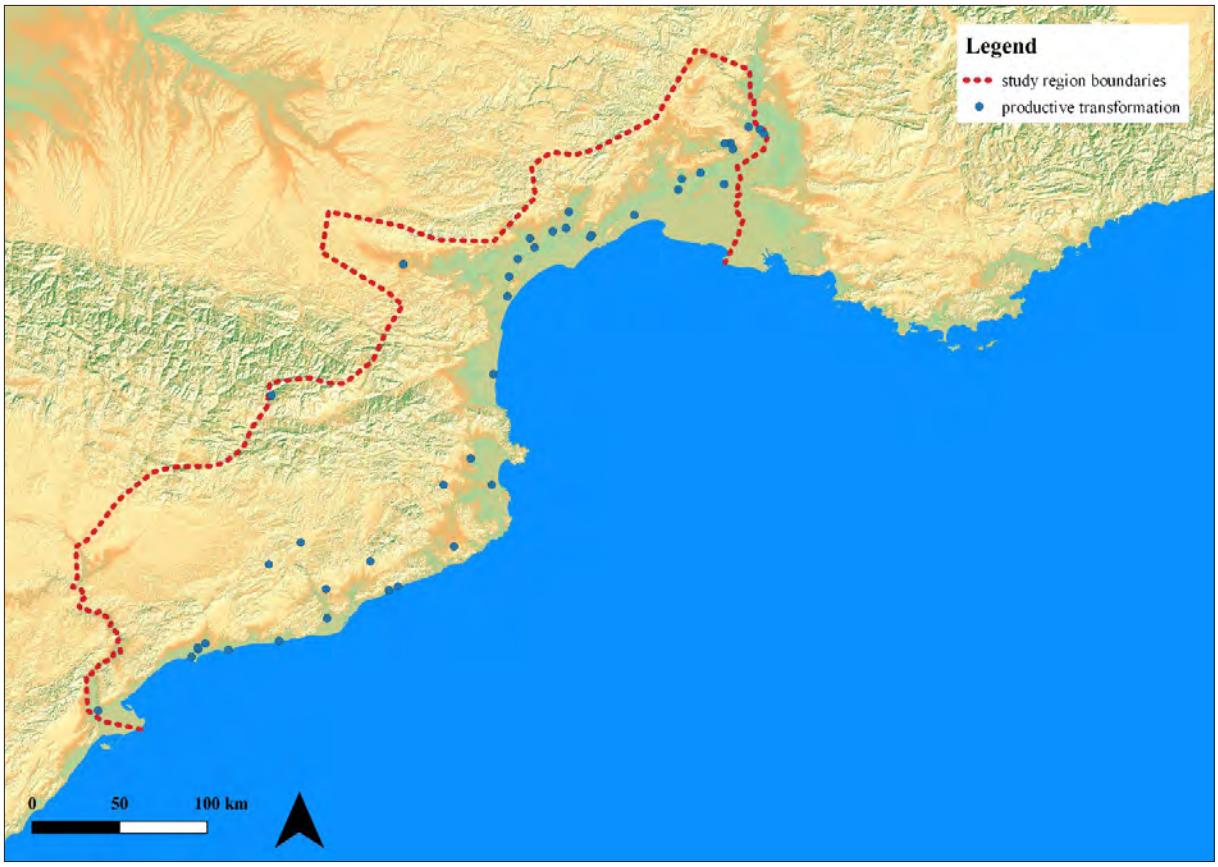

Fig. 5.15: Distribution of productive transformation at (former) villa sites in the southern provinces (J. Dodd).

5.4.5a DISTRIBUTION AND DENSITY

Three regional groups of sites can be identified in the distribution of productive transformation at villa sites in the study region. Firstly, a group of sites in the *Ager Tarraconensis*, secondly, a dispersed group around Narbonne and Béziers and thirdly, a further dispersed group between the Rhône and Nîmes (figure 5.15). Between these clusters, productive transformation has a much lighter footprint, for example the hinterland of modern Catalonia and the littoral fringe between Barcelona and Chateau-Roussillon. The same pattern is also visible along the coast of the Étang de l'Or and the region of the Montpelliérois. There is also a notably lack of productive transformation in the Lauragais, although this appears to be more related to excavation bias than an actual settlement and transformation *lacunae*.

The above distribution demonstrates several important aspects of the Late Roman rural economy in the region. The distinct groups of productive sites surrounding the provincial capitals at Narbonne and Tarragona and major economic centres at Béziers and Nîmes point towards a continued town-country link between the two spheres (Mauné 1998). This link suggests that the economic network in the countryside went undisturbed into Late Antiquity, and that the patterns established in the 1st and 2nd centuries continued despite the recessions in the olive oil industry in the 2nd and 3rd centuries (Pellecuer and Pomarèdes 2003). The continuity of the town-country axis and supply and demand curves (theorised for *Britannia* by Hodder and Millett 1980) is important and marks a significant level of divergence from the northern provinces, where continuity is the exception rather than the norm.

The role of villas as larger primary producers of both raw and finished commodities is illustrated in figure 5.16. The majority of sites in *Narbonensis Prima* and *Tarraconensis* and 50% of sites in *Viennensis* demonstrate moderate levels of economically productive change, marking villa complexes out as signifi-

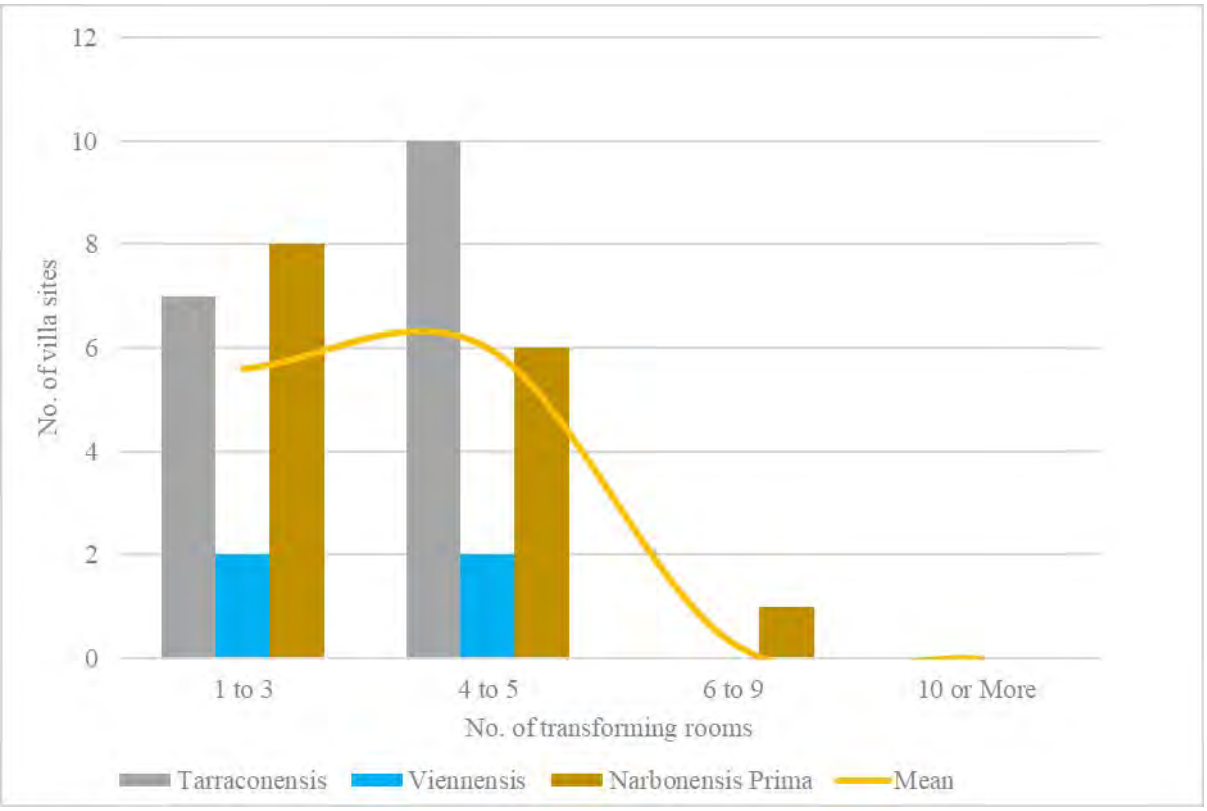

Fig. 5.16: Density of productive transformation at individual villa sites by province measured by number of transforming rooms (*n*=36) (J. Dodd).

cant rural producers. Although there is some variation, for example, a higher proportion of smaller scale sites in *Narbonensis Prima* and an opposing situation in *Tarraconensis*, generally, there is a significant level of regional homogeneity. The larger presence of transforming contexts in villas points towards the production of consumable commodities for a higher level of demand than small-scale production would suggest. It indicates either a wide distribution of goods or a reasonably high-level of demand from nearby towns and *agglomerations secondaires*. The presence of clusters of economically productive villas around the larger urban centres would point towards the latter approach with larger scale production at villas supporting demand for goods in the towns and cities of the region.

There is certainly no indication that the transformation of villa settlements in the productive sphere is linked to the phenomenon of increasing density of nucleated settlement. Continuity in the *agglomerations secondaires* of the region (see figure 5.20 and Schneider 2006; Schneider 2002, 34-38) points towards several levels in a settlement hierarchy with *agglomerations* and rural settlements playing similar roles on different scales in Late Antiquity, with disruption only occurring from the late 5th century onwards (Schneider, Fauduet and Odenhardt-Donvez 2007).

A specification of productive activities at villas demonstrates the wide range of economic activities present in transforming villas in the region in Late Antiquity (figure 5.17). Arable production is the most dominant form of productive transformation, followed by oil and wine production. These three forms of transformation are further explored in 5.4.3bi. This domination is understandable, given the prevalence of both grain production and the repeated evidence for industrial-scale production of olive oil (Cayn *et al.* 2017 for an overview) in the region. What is important to note is the lack of significant combinations of different types of industrial production with agricultural processing. Agricultural and oil and wine production is often, but not exclusively divorced from other forms of artisan production

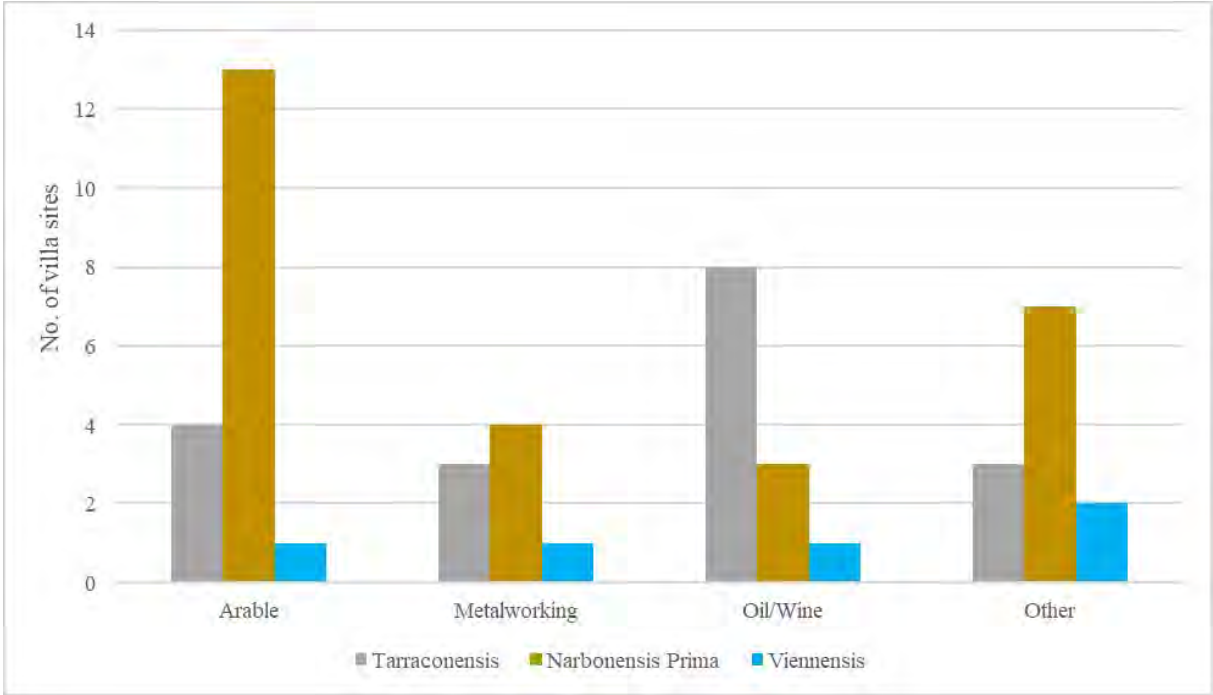

Fig. 5.17: A specification of productive activities at Late Antique villa sites by province and class of activity where data is available (*n*=48) (J. Dodd).

and indicates that productively transforming villas had no need for self-sufficiency in Late Antiquity. Production can therefore feel isolated, but in reality, it was linked into a larger network of different classes of sites and its presence demonstrates there was significant interdependency between different sites in Late Antiquity.

What is surprising about this data set is the presence of other forms of production. For example, there is the presence of large-scale and, apparently regionally viable, ceramic and tile production at a number of important villa sites. Béziers - La Courondelle appears to be producing a range of coarseware forms throughout the 5th and 6th centuries (BSR 2008, 123-125) whilst A75/La Quintarie (Pomarèdes *et al.* 2005) was reoccupied in the late 4th century to produce a range of *dérivées des sigillées paléochrétiennes* forms.

The notable lack of metalworking at sites is unexpected. Some metalworking does occur in all regions, although often in tandem with other forms of production, for example leatherworking at Dourbie. The lack of widespread metalworking is indicative of production continuing at other sites, the most likely candidates being *agglomerations secondaires*, where economic activity continued beyond the final abandonment of the villa system in the 8th and 9th centuries (figure 5.3). This indicates a situation where metalworking, either in repairing or primary phase production, was not of significant importance to the villa-owning population as it was readily available through regional distribution networks from other sites.

5.4.3B THE RURAL ECONOMY

This section analyses the breakdown of individual economic activities in the region. It includes both rural crafts and industries such as metal processing and the agricultural economy before developing an approach to changing economic patterns in the transforming villa landscapes of the provinces of *Narbonensis* and Northeastern *Tarraconensis*.

5.4.3b.i The arable economy

a) The economic background

Economically, our understanding of the countryside of *Gallia Narbonensis* and *Tarraconensis* is highly fragmentary. Some regions, such as the Bitterois and the hinterland of Nîmes have seen large, detailed (Mauné 1996; Buffat 2011) or micro-regional studies (Trément 1996) whilst others, such as the inland hinterland of all three provinces have undergone little or no analysis. This leaves a very patchy picture in terms of the overall view of the economic infrastructure of the region. Historically, the region experienced a slow development trajectory and an expansion of Italic landholding and exploitation models from the 1st century BC onwards. Slightly different patterns to this development are present in *Tarraconensis* and *Gallia Narbonensis* (Revilla Calvo 2004; Bursch *et al.* 2015). New styles of exploitation went hand-in-hand with an increasingly developed economic specialisation at individual sites and the expansion of dedicated olive oil and viticulture industries (Buffat and Pellecuer 2001 for the case of wine production in *Narbonensis*).

From the middle of the 1st century AD onwards, the region experiences a radically different trajectory. Occupation rates and presumably agricultural intensity experience three 'crashes': the first at the end of the 1st century, the second at the end of the 2nd century and the last at the end of the 3rd century (Brun and Congés 1996). This detrimentally affected agricultural production, primarily affecting the production of olive oil but having a knock-on effect on cereal processing. In contrast, the Late Antique landscape appears to be dominated by a large amount of small-scale agricultural producers with larger scale production at villa sites increasingly uncommon from the late 4th century onwards, for example at Gruissan-Saint Martin le Bas (BSR 2012, 32-35), where settling tanks and agricultural buildings were abandoned in favour of smaller facilities in the 4th century. The large-scale and as-yet-unpublished work by Petitot (1993; 1994; 1995) has established that other forms of settlement as well as some villas were producing at a high level into the Late Roman period. It seems likely that *Narbonensis* was producing a surplus in the 4th and early 5th centuries, enough to supply both the urban centres and perhaps for some level of export, supporting some of the assertions made by Lewit (1991) on the capacity of the Late Antique rural economy.

b) An approach to agricultural production and output at transforming villas

Approaching agricultural production and output in *Tarraconensis* and *Gallia Narbonensis* is complex and often contradictory. From an economic point of view, the continued presence of secondary centres and villas points towards the continuity of rural exploitation patterns. This interchange, structured around the market exchange of consumable commodities, was set within a very deep penetration of the monetary economy into the settlement hierarchy. However, fluctuations in supply did occur and it appears that imitation coinage and counterfeiting was a major issue in *Narbonensis* during the 3rd century (Estiot 1996, 47-49). This system was supported by the long-term occupation and economic functionality of the *agglomerations secondaires*. These secondary centres supported market-based interactions well into the Early Medieval period and helped sustain a dense villa network both north and south of the Pyrenees, although evidence for secondary centres in Northeast *Tarraconensis* is sadly lacking.

From the late 4th century onwards, there is evidence for a changing pattern of exploitation. The evidence from a range of individual sites points towards increasing storage capacity and agricultural processing. Data from a range of sites, for example at Puig del Baja (Kotarba 1996), supports the assertion that production and storage was beginning to be more centralised at surviving villa complexes. Aspiran - St. Bezard/Dourbie (BSR 2012, 132-136) is a clear example of this. (figure 5.18). The site underwent a large-scale 4th century reorganisation of the *pars rustica*. Pottery production was scaled back and many of the ancillary buildings were abandoned. By the late 4th century, production was concentrated on several buildings closer to the main house which itself was undergoing rapid habitational transformation. This concentration of storage facilities took the form of one large barn-like structure and a dense cluster of

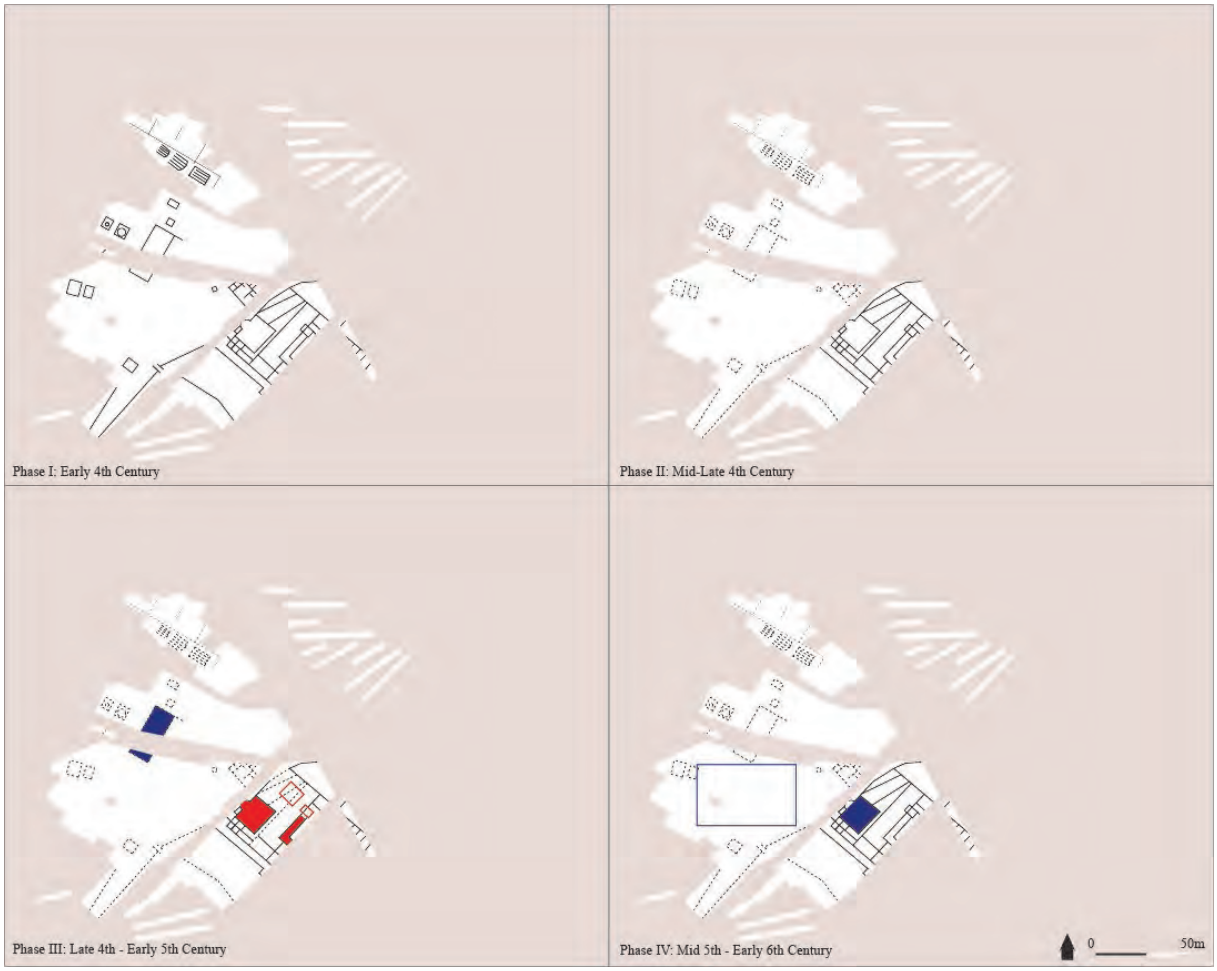

Fig. 5.18: Shifting centralisation of storage in the Late Roman period from the example of Aspiran - St. Bezard/Dourbie: Silo zones and storage areas develop from Phase III onward (highlighted in blue) as part of a larger reorganisation of the site (highlighted in red) (Dodd, adapted after BSR 2012, 132-136).

grain silos, some of which were in use into the 6th century. This pattern is repeated across a wide range of sites and points towards a centralisation of production and an increased need for storage capacity, presumably stemming from an increase in agricultural yields. Although this supports general assertions that the rural economy was nearing full production capacity in the late 4th century (Lewit 1991), this is not the whole story. There is a patchy picture across Northeast *Tarraconensis* with some sites, such as Els Munts (Bou *et al.* 1998), experiencing large-scale contraction of their *partes rusticae* in the 3rd century without a 4th century production phase of any size. This points towards a very fragmented agrarian situation where local conditions and the choices of individuals seem to have played a greater role than larger supply and demand cycles.

Overall, it does seem that there is a trend towards an increased level of capacity in the cereal economy of *Gallia Narbonensis* and Northeast *Tarraconensis* in the second half of the 4th century. By the middle of the 6th century, this trend has completely reversed and by the late 6th century at the latest, the transforming villa was no longer acting as an important producer in the rural economy. Although there is evidence from a range of sites for the continuity of agricultural processing; production continues and there is evidence of intense storage construction at a number of larger sites in the 6th and 7th centuries, including Vilauba (Castanyer and Tremoleda 2007) and St. André-de-Codols (Pomarèdes *et al.* 2012). The domination of the villa economy in the Late Roman period seems to have been eroded by other agriculturally active settlements. Secondary centres or semi-urban sites appear to be engaged in a

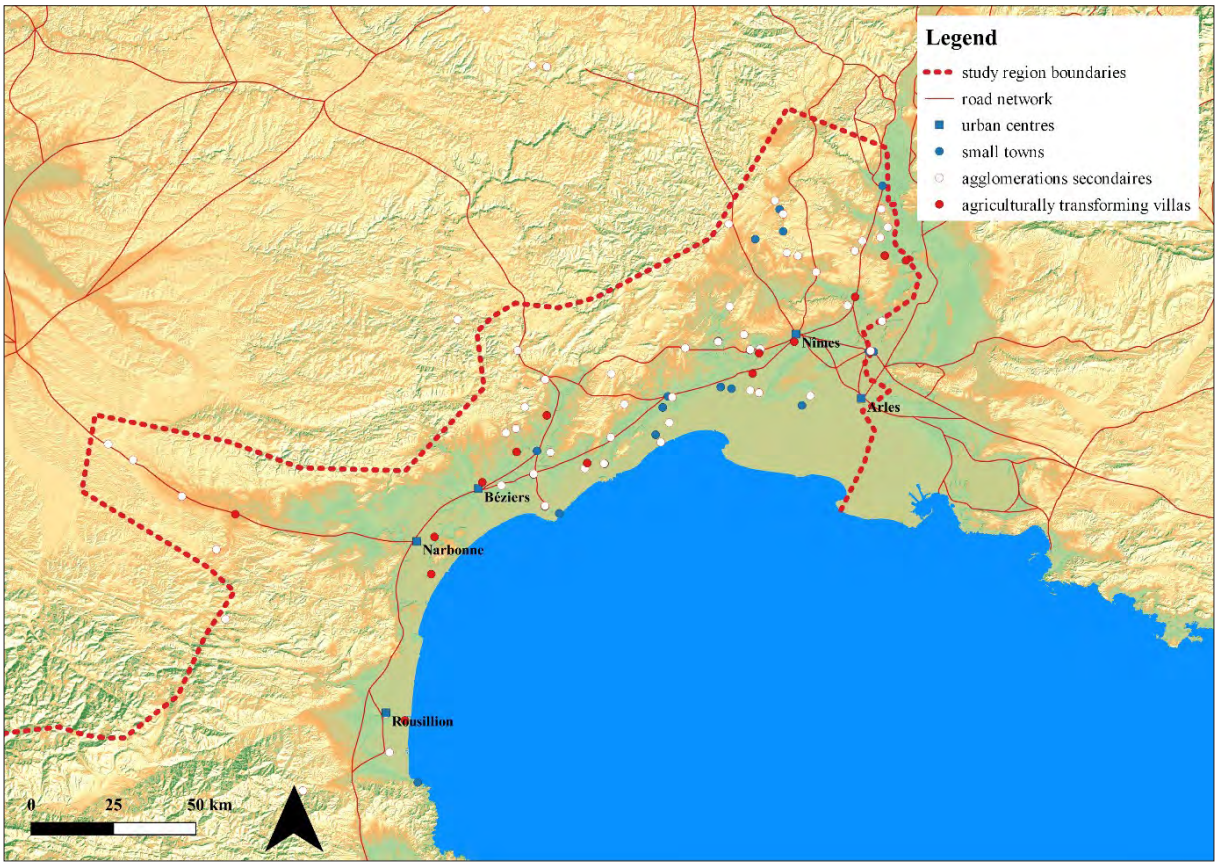

Fig. 5.19: Productive transformation in *Gallia Narbonensis*: agriculturally transforming villa set against the road network and occupied *agglomeration secondaires* dating to the second half of the 5th century (J. Dodd).

degree of processing and collection of agricultural produce (Schneider 2002), whilst the development of villages and medieval villas appears to have also increased subsistence-level production in the rural economy (Schneider 2007). The evidence is not suggestive of an agricultural landscape in decline but rather one with increasingly changed priorities. The data presents a transforming villa landscape consisting of multiple small to moderate-level sites producing goods to satisfy local and regional demand rather than a supra-regional one. The wider political and economic changes in the Western Empire do not seem to have greatly affected agricultural production at villa sites. The shift from centralised production towards small-scale regional processing points towards an increasing fragmentation from the 5th century onwards rather than a drastic collapse driven by the failure of urban or military markets. Market exchange was the primary driver behind production in both *Tarraconensis* and southern Gaul and it is through this continued mechanism that macroeconomic exchange structures survived and urban consumption continued.

Some conclusions can be drawn by balancing an analysis of agricultural change against the better-recorded and better-documented *agglomerations secondaires* of *Gallia Narbonensis*. This type of analysis is only applicable in *Narbonensis Prima* and *Viennensis* because there is little information available on secondary centres in Northeast *Tarraconensis*. The continuity of larger rural centres within the landscape has already been alluded to; however, it is difficult to indicate the scale by which these small towns, *vici* and industrial sites influenced the economic landscape. In the majority of cases, these sites continued to be occupied into Late Antiquity and many functioned as economically active nodes into the High Medieval Period (for example, the sites in Fiches 2002). The spatial relationship between these sites and agriculturally transforming villas is illustrated in figure 5.19. The continuity of market functions at the surviving *agglomerations* tied the villas into a larger economic network, where small-scale producers could sell surplus on a

regional level. It is likely that *agglomerations secondaires* were also at the centre of a domanial system of sorts (Buffat 2011, 171-174) and their later development may suggest that they played an important role in the Early Medieval economy (Schneider 2002). Despite these changes, the simple pattern of the economy appears to have been maintained. The villas of the 5th and early 6th centuries provided agricultural goods to secondary centres for exchange with surplus entering the supply chain for the larger urban centres.

The 5th and 6th century landscape may have changed, but the patterns of rural consumption were relatively similar to the 4th century, albeit on a smaller scale. This points towards no real alteration to the market-based economic infrastructure in place in the region after the end of Roman political control. It would suggest that in terms of state policy and economic relationships, the region was something of a backwater. It produced the required surpluses needed by the state to feed the urban centres and therefore required little or no oversight or engagement. The data set out in the section provides little or no evidence for large-scale disruptive economic shifts in either Northeast Spain or *Gallia Narbonensis* in Late Antiquity.

c) Wine and olive oil

Wine and olive oil are key components of the rural economy in the region. Both processes are labour and capital intensive, requiring significant investment into facilities and installations, including settling tanks and presses. Wine production was a key element to the early Roman landscape, with dozens of sites identified as primary producers across the region (Buffat and Pellecuer 2001), although this has been poorly explored in Late Antiquity. The majority of sites in this data set are generally associated with the production of olive oil, a key foodstuff for the Roman period. Olive oil production was a highly labour-intensive process (Mattingly 1988, 50-52). It requires significant labour to develop and maintain both the fields and capital to invest and maintain the facilities for pressing and drying the olives. Harvesting the crop and pressing the olives into a paste was likely done by slave labour at which point settling tanks were used to allow the oil to separate and rise to the surface (Bruce Hitchner *et al.* 2002; 77-81). The finished product was generally left to settle in *dolia* or large settling tanks prior to shipping, usually in transport *amphorae* or wooden barrels (Esmonde Cleary 2013, 266). The customers of this trade utilised olive oil for a wide range of activities including cooking, lighting, and cleaning (Mattingly 1988, 34).

The development of an intensive network of mutually interdependent olive and wine farms, complete with the processing installations to turn the raw product into finished goods, is a key part of productive change at villa sites in Late Antiquity. Historically, there is evidence for an increase in olive oil cultivation in the Early Roman period. This was coupled with enormous investment in individual sites (Brun and Borréani 1998; Brun 2003). This expansion was followed by a series of crashes at the end of the 1st century, the end of the 2nd century and the second half of the 3rd century (Brun and Congés 1996, 236-246). Significant numbers of sites, for example at Creissel, underwent abandonment and production was drastically scaled back. The Late Antique use or reuse of settling tanks and presses is on a significantly less intense scale than in the Early Roman period and does not support large-scale export economics but rather local supply and demand dynamics. Olive oil production at sites such as Can Sans (Prevosti 1981) and La Gramiére (BSR 2001, 76-78) are on a small-scale. Settling tanks and processing apparatus are abandoned, for example at El Romeral, where the tank system was used as a waste dump in the 5th and 6th centuries (Diez Coronel and Pita Mercé 1969/1970). The continued use of industrial elements points towards small-scale production satisfying regional demand with little or no significant investment in the industry and a production cycle divorced from the supra-regional import-export market. The presence of regional supply and demand mechanics does suggest a rural population utilising Romanised foodways, even in transformed contexts and supports the assertion that the population were still utilising and interacting with Roman-style foodstuffs in a traditional way.

The presence of limited olive oil processing points towards a different focus for the production of this resource. It demonstrates that the villa landscapes of the region, especially in *Narbonensis*, were no longer

producing olive oil on an industrial scale. Several scenarios can be put forward for the shifting cycle of production. It is possible that other regions, such as *Baetica*, *Lusitania* and the African provinces were producing olive oil at a cheaper rate and therefore making export from *Narbonensis* uncompetitive. This suggestion has been used for other industries, such as *garum* production (Esmonde Cleary 2013, 167). Secondly, it is possible that a survey of non-villa settlements will illustrate that production had shifted towards other classes of rural settlement, or that there was a valid import market for olive oil from other regions; however, this is beyond the scope of this study.

5.4.3b.ii Rural Craft and Industry

a) Ceramic production

The localised production of ceramics is an interesting and important element to productive transformation in Late Antiquity. Eight sites spread primarily through Southern Gaul with two more located in *Tarraconensis* are present in this data set. Their intensity ranges from single kilns to larger batteries of 4 or 5 ovens and it appears that most of them are producing a mix of tiles and pottery. In most cases, this production is in the form of small-scale local courseware, for example at Béziers - La Courondelle (BSR 2008, 123-125) where an unquantified Bitteroise production of large cooking pots appears to be in production from the 5th to mid-6th century. This would point to local or regional distributions of ceramic output from these kilns from the early 5th century with pottery serving local demand and little or no material making it out of the local *territorium* of the villa. Notably, these localised ceramic productions appear to primarily date to the late 5th and 6th century, after the end of formal Roman control and this may reflect the decrease of longer distance trade, which encouraged the development of local economic capacity in some craft activities.

One specific case study does not fit this localised pattern of production. The villa site at Pezenas/ Clermont-L'Herault - La Quintarie (A75 Junction) was abandoned at the end of the 3rd century as part of one of the crashes in rural settlement rates and experienced a late 4th to mid-5th reoccupation phase (Pomarèdes *et al*. 2005). This reoccupation took the form of a minor habitational transformation phase and the production of ceramic tiles and more importantly, an oven for the production of *dérivées des sigillées paléochrétiennes*: a grey or orange glossed fine ware derived from the *terra sigillata* tradition (see Rigior and Rivet 1985 for an overview of distribution in Languedoc). This was a relatively widespread ceramic in Southern Gaul, and it appears to have been exported to *Tarraconensis* and Italy in the Late Roman period. It suggests that at least one reoccupied villa was acting within larger supra-regional cycles of supply and demand and was not confined to local production. The singular nature of this production marks it out as anomalous and it is probably more appropriate to view *dérivées des sigillées paléochrétiennes* production at La Quintarie within the wider *milieu* of rural craft sites rather than transforming villas.

b) Metal processing

Metalworking in the three southern provinces is generally small-scale in nature; however, there are a number of exceptions. Metalworking sites are spread across all three provinces with a slightly skewed bias towards *Tarraconensis*. Primarily, the data set deals with the processing of smelted or recovered metal into objects or the repair of objects. This appears to be equally divided between sites only dealing with ferrous material and sites dealing with a mix of metals (table 5.2). However, in many cases, the poor status of publication leaves much to be answered on the actual practicalities of processing at individual sites. Evidence, in the form of slag, hammer-scale or furnaces, points towards both bronze and iron working or secondary production at Gruissan - Saint-Martin-le-Bas (BSR 2012, 32-35) as part of a much larger site that included at least one glass oven whilst small-scale iron working is present across a range of other sites. Only one site, Carcassonne - Lo Badarel (BSR 2008, 19-21) displays evidence of more robust primary iron production.

province	ferrous	non-ferrous	both ferrous and non-ferrous
Tarraconensis	3	0	1
Narbonensis Prima	1	0	1
Viennensis	0	0	1

Table 5.2: Breakdown of villa sites by type of metalworking present where known (J. Dodd).

Much of this presents a 'mixed bag' of evidence pointing towards small-scale processing of metalwork across all three regions. This suggests a level of localised production and repair of essential goods rather than a widespread distribution of finished metal goods for regional exchange. In most cases, this small-scale production appears to be a little haphazard and it is rarely separated from habitational zones at villa sites (figure 5.20), suggesting that the development sequence for such craft activities was not a truly planned phenomenon but organically grew from individual requirements.

Temporally, metalworking is widespread with little or no evidence for pulses of activity coinciding with economic shifts. Metal processing occurs from the late 4th century until the 7th and is an element of activity at some sites for almost two centuries, for example at Els Castellets (Roig Pérez, Gimeno Mariné and García-Medrano 2015) where metal processing shifts from sector to sector within the former *pars urbana* from the middle of the 5th century to the 7th century. Instead, the gradual implementation of metalworking activities across sites over a long period strengthens the case for the haphazard development of facilities to suit the requirement of individual sites rather than economic shifts that prompted mass development of 'in-house' metalworking facilities.

This is indicative a completely different productive pattern for metalworking in Late Antiquity. The presence of other forms of site, including production centres such as Agde, points towards a productive hierarchy in which *agglomerations secondaires* and to some extent the major urban centres and other rural sites played a role in producing this resource for the wider rural market (Bermond and Pomarèdes 2002). The development of metalworking facilities on transforming villa sites is indicative of very localised supply and repair, almost certainly because the trade networks were in place to bring finished goods in from other classes of sites without undue effort.

5.4.3c DISCUSSION – BUSINESS AS USUAL?

The Late Antique rural economy of *Gallia Narbonensis* and *Tarraconensis* displays a significant level of continuity with the settlement patterns and hierarchies developed in the early centuries of Roman rule. The villas provided agricultural commodities and some finished goods to the urban and semi-urban consumers and money and high-status material culture flowed the other way, with landowners paying tax to the administrative infrastructure. This system survived repeated recessions and significant contractions in the Middle Roman period with some changes in the scale and scope of villa production both north and south of the Pyrenees. The most important change that the villa system underwent in Late Antiquity was the slow fragmentation and contraction of supply and demand networks. The collapse of the olive oil export industry over the course of the 3rd century (Brun and Congés 2002) naturally affected industrial level production of this resource and may be the initial impetus behind the diversification of production apparent in Late Antique villas. Ceramics, small-scale olive oil, leatherwork, glass manufacturing and tile production are present in the archaeological record and appear to be produced for use at both the local and regional level. The more easily produced goods, primarily cereals and to a lesser extent, olive oil, seem to be being produced on a larger scale in the 4th and early 5th centuries. This would suggest a larger distribution of these goods and points towards 'business as usual' for the market exchange of some resources in Late Antiquity. In essence, this creates two economic tiers within the villa economy;

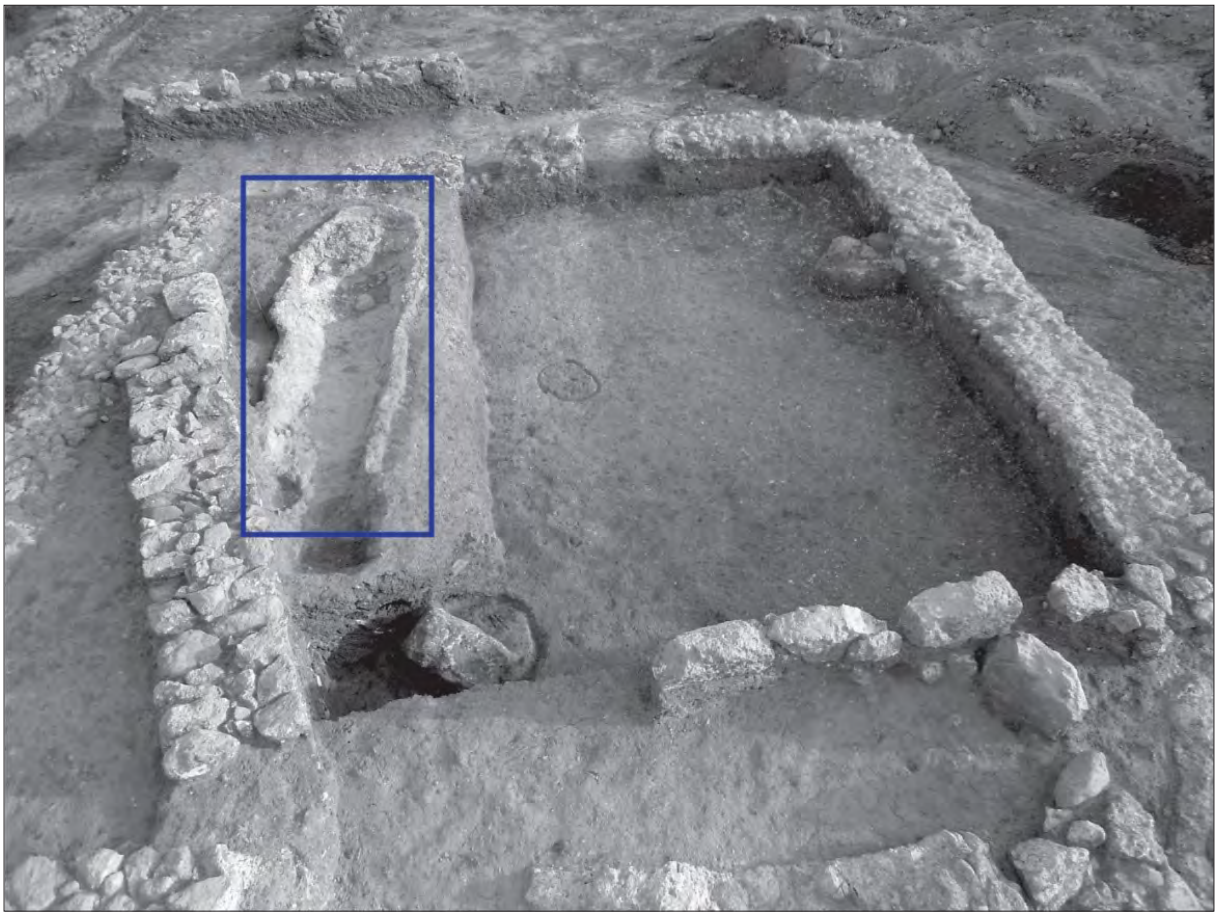

Fig. 5.20: A 7th century channel furnace, highlighted in blue, inserted into a former area of the *pars urbana* of Els Castellets (Dodd, adapted after Roig Pérez, Mariné and García-Medrano 2015, Fig. 8, 395).

a small-scale cycle of local and regional supply and demand, and a higher tier of surplus production and consumption tied into the wider Roman and post-Roman economy. The first of these sits at a local and regional level and consists of sites displaying evidence of diversified production. These small-scale producers, for example, the ceramic kilns at Beziers - La Courondelle (BSR 2008, 123-125) or the lime kilns at La Burguera, Salou (Adserias Sans *et al*. 2001) were operating on a low level, for example, supplying course wares to the region. This group of sites appears to be somewhat isolated from larger exchange patterns and, in many cases; there is evidence for open-ended and long-term productive use of these sites for the regional production of diverse consumable commodities. This isolation is not completely the case as some sites, such as Aspiran - St. Bezard/Dourbie (BSR 2012, 132-136), display evidence of both large-scale agricultural production as well as small-scale craft production, in this specific case, leatherworking. This may point towards some sites producing goods at both a regional and surplus level of production. The second tier of sites is linked to a much larger cycle of production and consumption. It comprises large agriculturally orientated sites able to produce a surplus of bulk produce at a higher level of supply than smaller, diversified sites are able. These sites, for example Loupain – Le Pres Bas (Lavagne, Rouquette and Prudhomme 1981) or Les Espriráu (BSR 1996, 78) are characterised by larger areas of storage and processing facilities and seem able to produce bulk agricultural resources at a surplus level. These sites were tied into a larger provincial framework of economic interaction. The integration of these villas into a wider network of supply and demand is similar to the situation in the 1st and 2nd centuries and suggests that the higher tier of villa producers was still instrumental in supporting semi-urban and urban markets into the early 6th century.

This two-tier system of economic output suggests an increased division between the regional and the provincial economies. The provincial economy, typified by larger-scale producers was geared towards the mass production of bulk or simple goods, whilst the regional economy was producing a range of finished goods on a smaller scale to satisfy a lower level of more localised demand. The increasing divergence of the two economies in the 5th century points towards a developing division of labour and production. The fragmentation of the villa economy of the region had significant knock-on effects to the development of rural settlements. Fragmentation was a key element in the collapse of top tier site occupation in the 6th century. The disappearance of the Roman state withdrew the mechanisms for state-sponsored change and the shifting patterns of production towards *agglomerations secondaires* and developing villages did not support continued occupation of non-diversified 'top-tier' sites. This is visible through the survival of the smaller diversified sites in the *longue durée* with very few of the 'top tier' sites adapting enough to diversify production in the changing world of the 6th and 7th centuries.

In essence, this two-tier system, present from the late 4th to the 6th or 7th century, created a parallel economy, isolated to some extent from the wider economic cycles of the provincial and supra-provincial economy and interdependent on local and regional demand patterns. This approach specifically applies to the villas in this data set. Further research, especially on non-villa sites in the region would provide a much-needed further angle on the later development of the landscape in Late Antiquity. The case of the villas would certainly point towards a very fragmented economic landscape in the countryside of Northeast *Tarraconensis* and *Gallia Narbonensis*. Both areas were dominated by two distinct groups of economically active sites catering to completely different supply and demand cycles.

5.4.4 FUNERARY TRANSFORMATION

Funerary transformation, simply the reuse of former villa buildings for burial activity, is less common than other forms of change at rural sites and is generally confined to secondary phase activity on villa terrains. A total of 38 sites, spread relatively equally throughout the three southern provinces, are present in this data set. They range from small burials sites of single or multiple individuals to larger developed cemeteries. Although arguments have been made for the presence of a 'Germanic' material culture, for instance at Els Munts (García, Macias and Teixell 1999) the overwhelming majority of these burials are unfurnished and sit within a Late Antique tradition.

5.4.4A TEMPORAL AND SPATIAL PATTERNS

The subset of funerary data in this section displays considerable temporal and spatial variation. Temporally, the majority of transformation is concentrated between the 5th and 7th centuries across all three provinces under study; however, there is some evidence of a 3rd and 4th century build-up of this phenomenon (figure 5.21). With the majority of funerary transformation occurring in the immediate aftermath of Roman rule until the end of the 7th century, it is difficult to draw parallels between the situation in Southern Gaul and Northeast *Tarraconensis* and the situation in the northern provinces.

In terms of cemetery size, there is a domination across all three provinces by comparatively larger cemeteries of 10 or more individuals (figure 5.22). These large cemeteries take a number of forms. In some cases, for example, the supposed Merovingian cemetery at Les Angles - Saint-Etienne-de-Candau (Gagnière and Granier 1963a; figure 5.23), cemeteries are imposed across all zones of site whilst in the majority of cases, larger cemeteries are somewhat divorced from the occupied zones, utilising abandoned zones of the *pars rustica* or the wider villa terrain. This is especially prevalent in Northeast *Tarraconensis*,

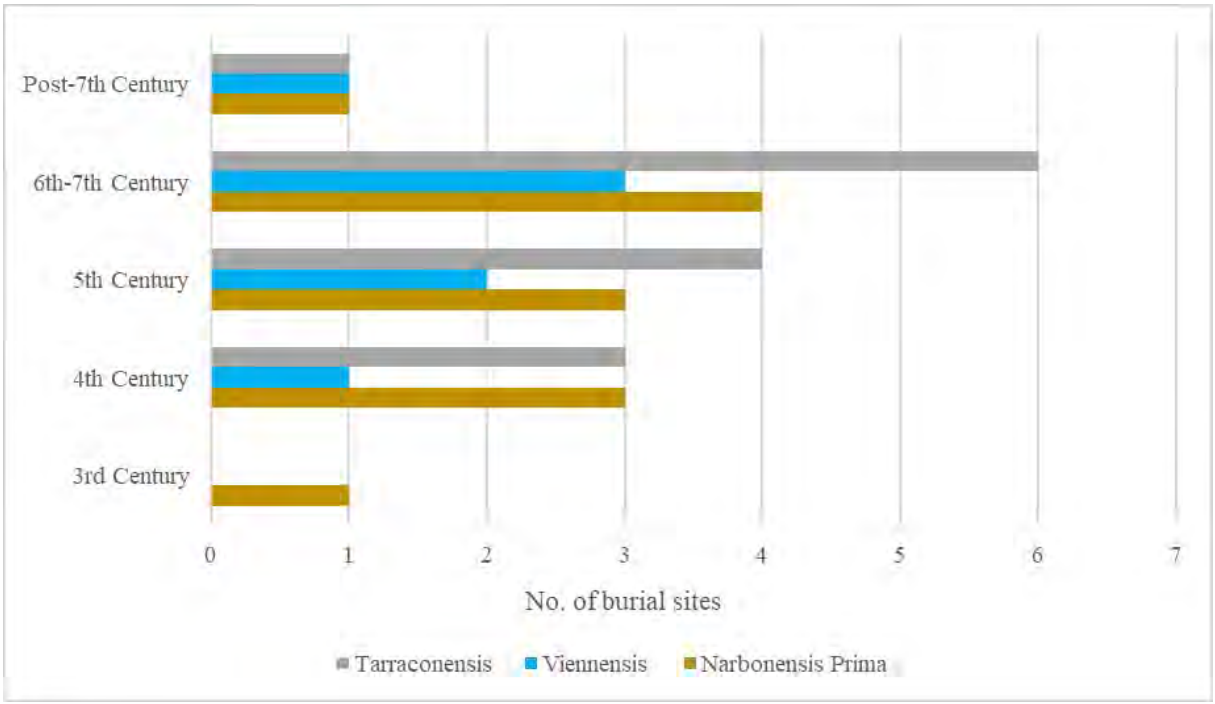

Fig. 5.21: Temporal breakdown of the number of villas or former villas demonstrating funerary transformation by Late Roman Province (*n*=33) (J. Dodd).

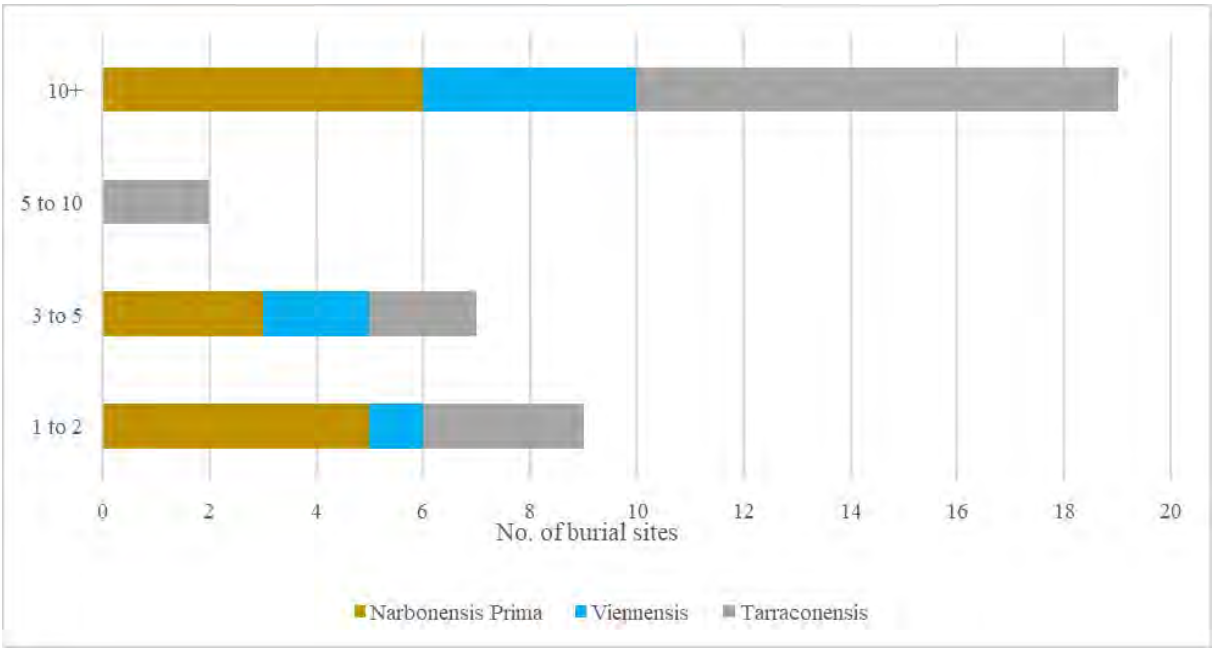

Fig. 5.22: A breakdown of funerary reuse at villa sites by number of individuals recovered where data is available (*n*=37) (J. Dodd).

where *partes rusticae* were often recommissioned for burial purposes, for example at Can Peixu (Padrós and Chavarría 1999) and Els Munts (Genera, Macias and Teixell 1999).

Half of all surveyed sites (50%) consist of comparatively larger cemeteries with at least 10 interred individuals, whilst 23% of sites only demonstrate single or double inhumations. The remaining 27% are dominated by groups of burials between 3 and 5 individuals (figure 5.23). In terms of morphology and practical

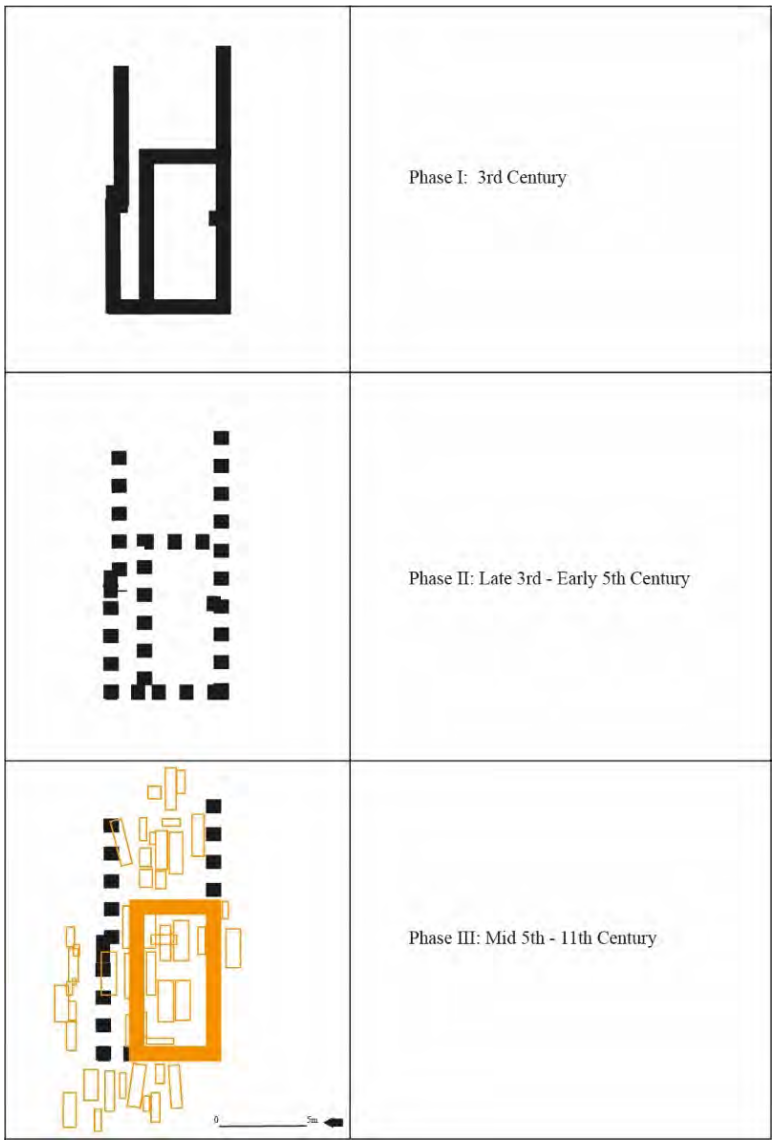

Fig. 5.23: Large-scale reuse of a former villa building for funerary purposes: a 5th to 7th century Paleo-Christian and Frankish cemetery at Les Angles - Saint-Etienne-de-Candau (Dodd, adapted after Gagnière and Granier 1982, fig. 2, 383).

internment, these sites bear similarities to the groups of unfurnished small-scale burials in the northwestern provinces that may act as termination rituals for sectors of villa complexes. There is no evidence for an increasing size of cemeteries along temporal lines in this data group, with both smaller cemeteries and large developed Paleo-Christian cemeteries in use at the same time in spatially similar situations.

The majority of these cemeteries lie firmly within the Late Antique tradition of unfurnished burials (Halsall 1995, 14-15, 17). There is plentiful evidence of larger cemeteries without 'Germanic'-style objects, and although few plans have been published, it seems that the majority of published cemeteries do not adhere to *Reihengräber*-style burial patterns. Only a single site has been associated with 'Germanic'-style burials and this is explored in more detail in 5.4.3c. Chronologically, the lack of grave goods makes them difficult to date; however, the indications suggest that the larger cemeteries dominate the landscape from the 5th to 7th centuries AD. This points towards two important considerations. Firstly, that there was a vibrant and apparently relatively stable rural population utilising these sites, presumably within the framework of the increased production and habitational change noted in 5.4.1 and 5.4.2. Secondly, it points towards of

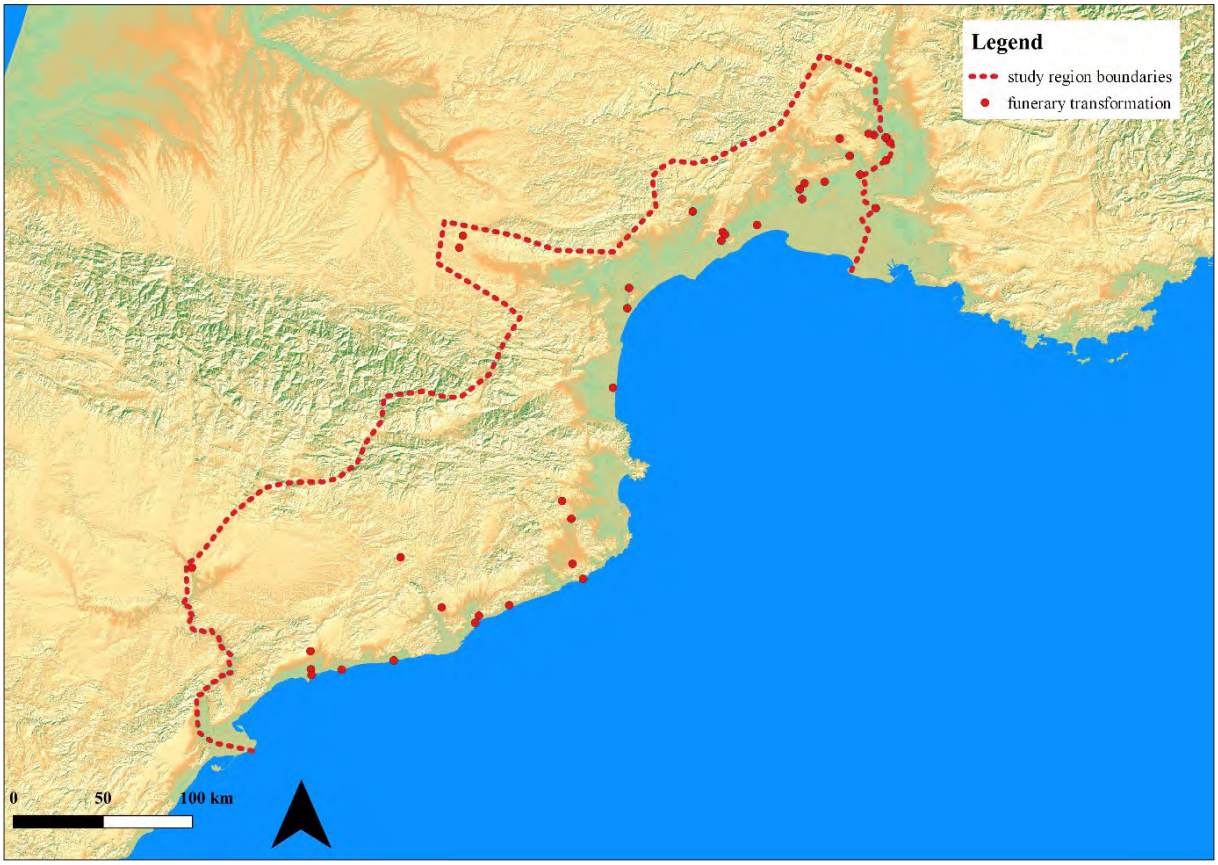

Fig. 5.24: Distribution of funerary reuse of villa terrain in the southern study region in Late Antiquity and the Early Medieval Period (J. Dodd).

continuity of rural population and Late Antique burial customs long after the end of Roman political control. The lack of 'Germanic'-style cultural indicators suggests that the population utilising these large cemeteries was not 'Germanic' in origin, nor had adopted the funerary traditions of the new 'Germanic' elite. This stands in sharp contrast with other regions, such as the Central Spanish Meseta, where a 'Visigothic' tradition appears to have developed from the 6th century onwards (see 5.4.3c).

5.4.4b DISTRIBUTION AND PATTERNS

Spatially, there is significant diversity in the distribution of funerary transformation at villa sites. The majority of sites are located close to the littoral fringe, or in the case of Northeastern *Narbonensis Prima* and *Viennensis*, close to the Rhône and the *territorium* of Nîmes (figure 5.24). This broad spread of sites, primarily along the fertile littoral plains, does not indicate outside influence on burial customs in the region but rather demonstrates the ubiquity of the phenomenon across all three provinces and the cultural importance in all regions of the repurposing of elements of (former) villa sites for funerary activities.

Several groups of sites are present in the data set and illustrated in figure 5.24. The largest and most important of these groups lies between the *territorium* of Nîmes and the Rhône River. This group of sites includes a mix of larger and smaller cemeteries. It highlights the continuity of rural settlement around the city and the continuity of rural populations and traditions, although further interpretations are hampered by the lack of detailed study of this group of sites. The majority of funerary sites are spread throughout the region without significant clustering. Small groups of sites do appear near urban centres, such as Tar-

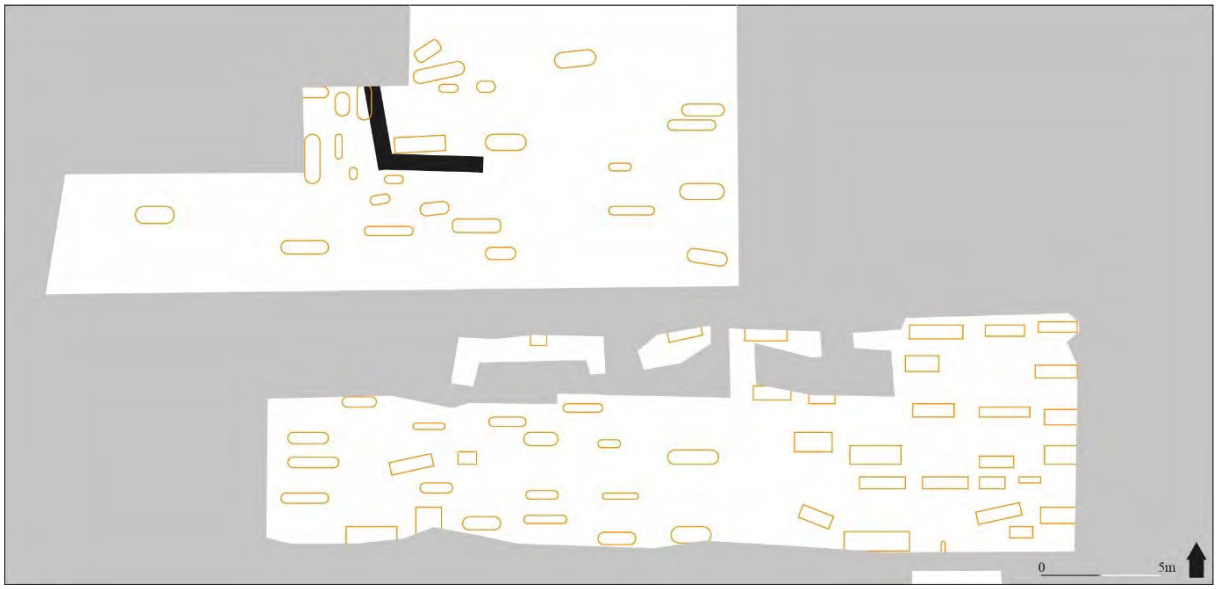

Fig. 5.25: The single example of 'Visigothic' burial traditions from a former villa site in the study region: the Reihengräberfeld cemetery close to the territorium of the villa at Pla de l'Horta (Dodd, adapted after Llinás Pol et al. 2008, 291, fig. 2).

ragona and Barcelona, although these do seem to be in the minority. In short, there appears to be little or no visible pattern to the wider distribution of sites outside the area of Nîmes and the Rhône Valley.

5.4.4c DISCUSSIONS – THE ROLE OF MIGRATION

Establishing 'Germanic' migration in *Gallia Narbonensis* and *Hispania* is highly complex and presents a significant problem within the data set. Historically, the *Reihengräber* model was applied to 'Visigothic' cemeteries such as the archetype at El Carpio de Tajo (Ripoll 1985) and was significantly influenced by 19th-century cultural-historical trends (*cf.* Ripoll 2010 for a summary of the issues and Molinero Pérez 1948 and De Mergelina 1949 for original site reports). Recent work has established that many of the cemeteries originally identified as 'Visigothic' due to the presence of 'Germanic'-style *Reihengräberfelder* and 'Germanic'-style personal adornments such as weapon-graves and lavish burials are highly exceptional (Ripoll 2011, 33-36). These large 'Visigothic' cemeteries are generally limited to the centre of the peninsular, primarily the Central Spanish Meseta. This zone is located between the Duero and Tagus rivers, in the centre of the Iberian Peninsula. Isolated outliers to this group do exist. There are important examples in Catalonia and Languedoc-Roussillon at Pla de L' Horta (Llinás Pol *et al.* 2008) and Estagel (Lantier 1943; 1949). Several other disputed cemeteries are located in *Aquitania* and *Narbonensis*; however, their 'Germanic' credentials have been questioned (Kazanski and Lapart 1995; Ripoll 2010, 168-169). This pattern is not paralleled in *Aquitania*, where the first Gothic *foederati* settlement occurred, according to the literary sources in 418 (Burns 1992). This is not the case in Narbonne either, where Visigothic magnates ruled between the 5th and 8th centuries. The majority of other cemeteries outside the central Spanish Meseta lack significant indicators suggesting they are of 'Germanic' origin (*cf.* Ripoll 2010, 166-167). Both the existing data and the historical approach to these burials (*cf.* Ripoll 2010) differs significantly from the approach pioneered in cemetery contexts in Northwestern Gaul (Theuws 2009), where some groups, primarily the Sueves, Vandals and Alans, appear to be completely archaeologically invisible (López Quiroga 2004; Díaz Martínez 2011).

Within the context of this data set, very few burials in *Gallia Narbonensis* or *Tarraconensis* can be related to either the Central Meseta tradition or demonstrate evidence of 'Germanic'-style material culture. A

Fig. 5.26: A typical example of a 'Hispano-Visigothic' lyriform belt and mounting plate from the 6th century (provenance unknown), similar to examples recovered at Viluba and Els Munts.[24]

single site, Pla de L' Horta (Llinás Pol *et al*. 2008, figure 5.25) displays evidence of Visigothic use of the villa terrain similar to the 'Germanic' funerary use of former villas in Northwest Europe. Unlike the case in Britain or Northern Gaul, where a significant majority of funerary transformation can be identified as Merovingian or Anglo-Saxon in style, the case is not the same for a broad identification of a 'Visigothic' burial culture at villa sites in *Narbonensis* or Northeastern *Tarraconensis*. Other than Pla de L' Horta, the earliest evidence of a similarity to the northern provinces are Merovingian cemeteries that begin to develop in partially occupied or abandoned villas in *Narbonensis* in the 8th century.

In terms of broadly 'Germanic' material culture, there is a light density of evidence, mainly from Northeast *Tarraconensis*. So-called 'Visigothic Grey Ware', lyriform belt buckles (figure 5.26) and isolated examples of aquiliform *fibulae* (figure 5.27) are present. Visigothic Grey Ware (*ceramique gris*) is the English term for a domestic ceramic group of related forms and styles although the group has been poorly defined, and it is difficult to ascertain typo-chronologies or definitions.[25] Traditionally, the grey fabric and incised decoration have been used to claim Visigothic evidence at villa sites, although gen-

[24] https://www.metmuseum.org/toah/works-of-art/1990.193.3ab

[25] See González Salas 1945 and Izquierdo Benito 1977 for reports representing many of the characteristics of this class of pottery as well as Bourgeois 1970 for a catalogue of 5th- and 6th-century grey wares from Barcelona

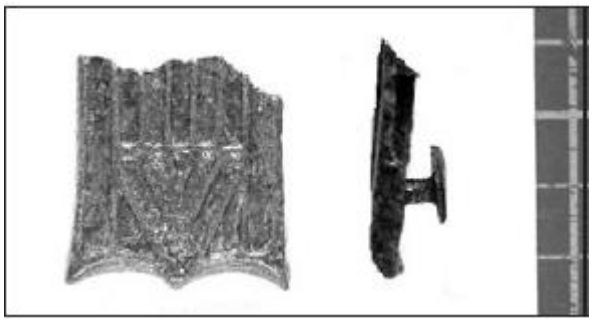

Fig. 5.27: A 'Visigothic' artefact from a villa complex: the base of a 7th century aquiliform brooch from Els Antigons (Puche, J.M., in Járrega Domínguez and Prevosti 2014, 238, fig. 25).

erally, this form is less dense in transforming contexts than the wide variety of ceramics in the Late Antique tradition at individual sites, such as the various forms of *Terra Sigilata Clara* and *dérivées des sigillées paléochrétiennes*.

Artefact analysis presents another problem. Lyriform belt buckles generally have been viewed as 'Germanic'-style objects, although recent work has rejected the Visigothic influence in the stylistic design of these ornaments (*cf.* Ripoll 1998). There does appear to be some level of 'Germanic' influence in the design and this study has followed general convention, labelling then as 'Hispano-Visigothic'. These buckles form a large part of the identification of immigrant communities in Hispania outside the Meseta zone. Some of these buckles have been tied to military service as *dona militaria*, although a distribution of buckles has not yet proved such an argument (*cf.* Ripoll 2011, 173). They are rare at villa sites in this database, with only a handful of examples spread mostly across Northeast *Tarraconensis* displaying such evidence. The same is true of the aquiliform *fibula*. This form[26], an eagle-shaped brooch is only documented at one site (see figure 5.27), where long-term occupation trends have been noted.

What these observations mean for the role of migration in the transformation of the villa landscape is complex and highly debatable. Two main approaches can be considered from this data set; either immigrant groups play no part at all in the later transformation of the villa landscape, something supported by the distinct lack of burial evidence from individual sites, or barbarian groups interact with the transforming villas in ways currently beyond our visibility. Despite these contrasting views, several points can be drawn from this data set. There is a clear lack of settlement reoccupation or funerary use at villa sites by groups utilising a 'Germanic' material culture, the data laid out in 5.4.1a combined with the evidence from cemeteries on villa sites suggests that there was not a social driver to occupy (former) villa sites in the mind-set of new immigrants into the region. The reasoning behind this is unclear but it may simply be that there was a much higher rate of continuity at villas in *Tarraconensis* and Southern Gaul than other regions and therefore, there was little opportunity for immigrant groups to utilise them. Funerary evidence at villa sites primarily comes from large 5th-7th century cemeteries within the Late Antique tradition. These cemeteries cannot be overtly connected to a 'Germanic' material culture, as is observed in other regions, and point towards a burial landscape dominated by a rural population acting within the Late Antique tradition of unfurnished graves.

The role played by Visigothic immigrants in the rural landscapes of Spain and Southern France is ambiguous. The 5th century landscapes appear to have little or no evidence of Visigothic settlement and finds. This suggests that the relatively stark nature of change manifested in the hybridising Romano-Frankish and Romano-Saxon societies of Northwest Europe were not paralleled in Southern Europe because of other poorly understood factors. This is compounded by the lack of archaeological evidence for immigrant populations in the 5th century. A statistical examination of the villa landscape in this study

[26] Santa-Olalla 1936 for the initial typology and Reynolds 2015, 168, fig. 3 for a wide range of other artefact groups

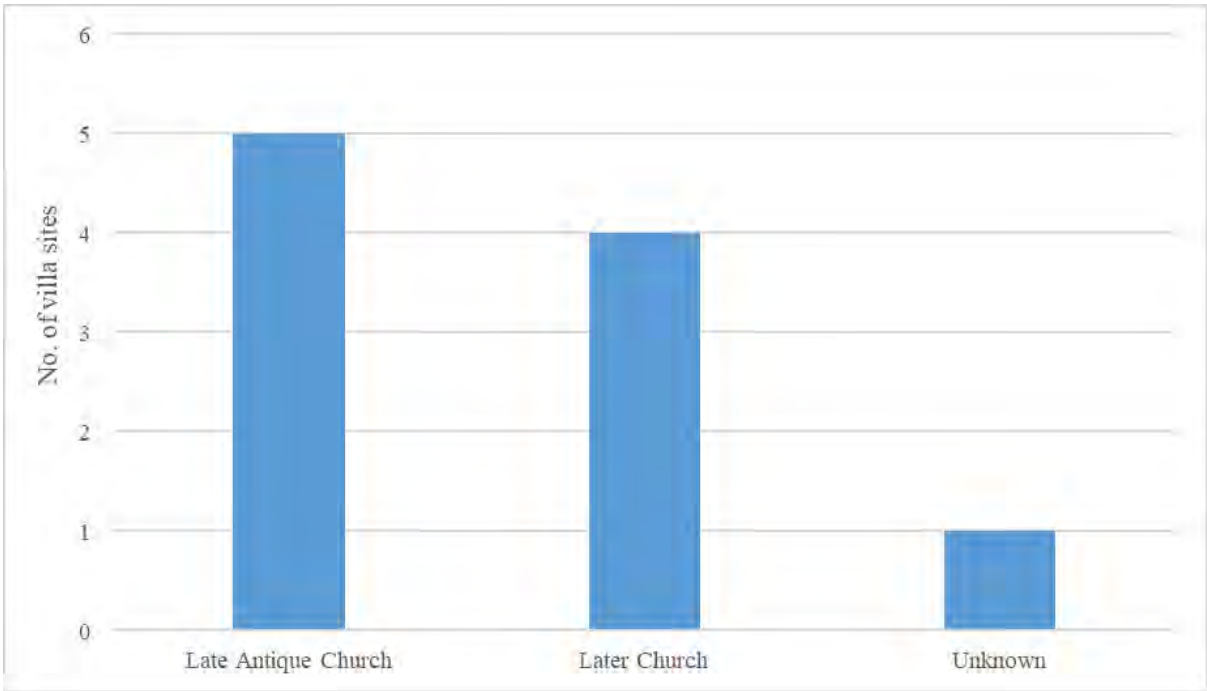

Fig. 5.28: Morphological breakdown of cultic architecture at villa sites (*n*=10) (J. Dodd).

cannot solve these problems but rather reinforces how poorly we recognise the mechanisms of ethnogenesis in the Visigothic case and how little we understand the migration of the Visigoths, Vandals, Alans and Suevi into Gaul and *Hispania* in the 5th century, particularly when considering the rural landscape.

5.4.5 CULTIC TRANSFORMATION

Cultic transformation, the Christian use of parts of buildings, has generally been viewed as an important part of the transformation of the villa in Mediterranean Europe. Repeated studies (Ripoll and Arce 2000; Chavarría 2007) have stressed the role of Christian monuments at villa sites, especially in the Iberian Peninsula. These studies have generally cherry-picked examples from a wide variety of regions, for example Fraga and Torre Llauder in *Tarraconensis* and Torre del Palma (Maloney and Hale 1996) and São Cucufate (Alarcão, Étienne and Mayet 1990) in *Lusitania* as well as a range of sites on the Meseta without examining the role and density of cultic transformations in villas in a particular region. The current study adopts a more empirical approach.

5.4.5A ARCHITECTURAL MORPHOLOGY

Morphologically, there is significant standardisation to religious use of villa complexes in Late Antiquity. Two broad categories are visible in the data set; later Medieval churches utilising former villa buildings and Late Antique churches, or house-chapels built into the fabric of the structures themselves (figure 5.28). The use of villa sites for Medieval churches will not be explored in great detail here. These sites often see churches develop from an intermediate stage of paleo-Christian cemeteries, for example at Les Angles (figure 5.23). The development sequence of such sites and the mechanics of church foundation is poorly understood and lies beyond the remit of this study.

Fig. 5.29: Cultic reuse of a *triclinium*: 5th-century Christian reliefs from the house-chapel at Fraga - Villa Fortunatus (adapted after Serra Ráfols 1943, Fig. 2, Lámina IX).

This morphological division isolates later Medieval churches from the important group of Late Antique chapels. Late Antique chapels generally take similar forms, where plans are available (figure 5.30), and it appears that most began life as private *oratoria* built by the villa-owning elite for personal religious purposes, although it appears that there was some resistance to this from the church authorities (Volpe 1996). The primary example for this is the often-cited house-chapel at Fraga-Villa Fortunatus (Serra-Ráfols 1943). The 4th century peristyle house, complete with chi-rho symbolism had a large extension added in the second half of the 5th century. This extension is characterised by tripartite nave, an apse structure and overt Christian décor (figure 5.30); a baptistery was later included. The site was abandoned in the 6th century.

This narrative demonstrates the ephemeral importance of cultic transforming sites such as Fraga - Villa Fortunatus on the development sequence of elite society in the region. Rural churches played little or no role in the longer development of rural society in the post-Roman period in this region, and certainly, the authority of aristocrat-bishops does not appear to have influenced the development of villa transformation in Late Antiquity to any great degree.

5.4.5b DISTRIBUTION

Contrary to the patterns insinuated in non-systematic studies, the use of transforming villa centres for cultic purpose is not as widespread in the data set as was initially anticipated. A selection of 11 sites spread throughout all three provinces display evidence of cultic transformation (figure 5.31). A single site is located in the *territorium* of Nîmes and a cluster of four sites is located in the hinterland of Narbonne and Béziers. The largest group of sites is located in *Tarraconensis* with 5 sites spread along the coastal fringe between Barcelona and Tarragona and two sites in the hinterland of the Central Catalan Depression.

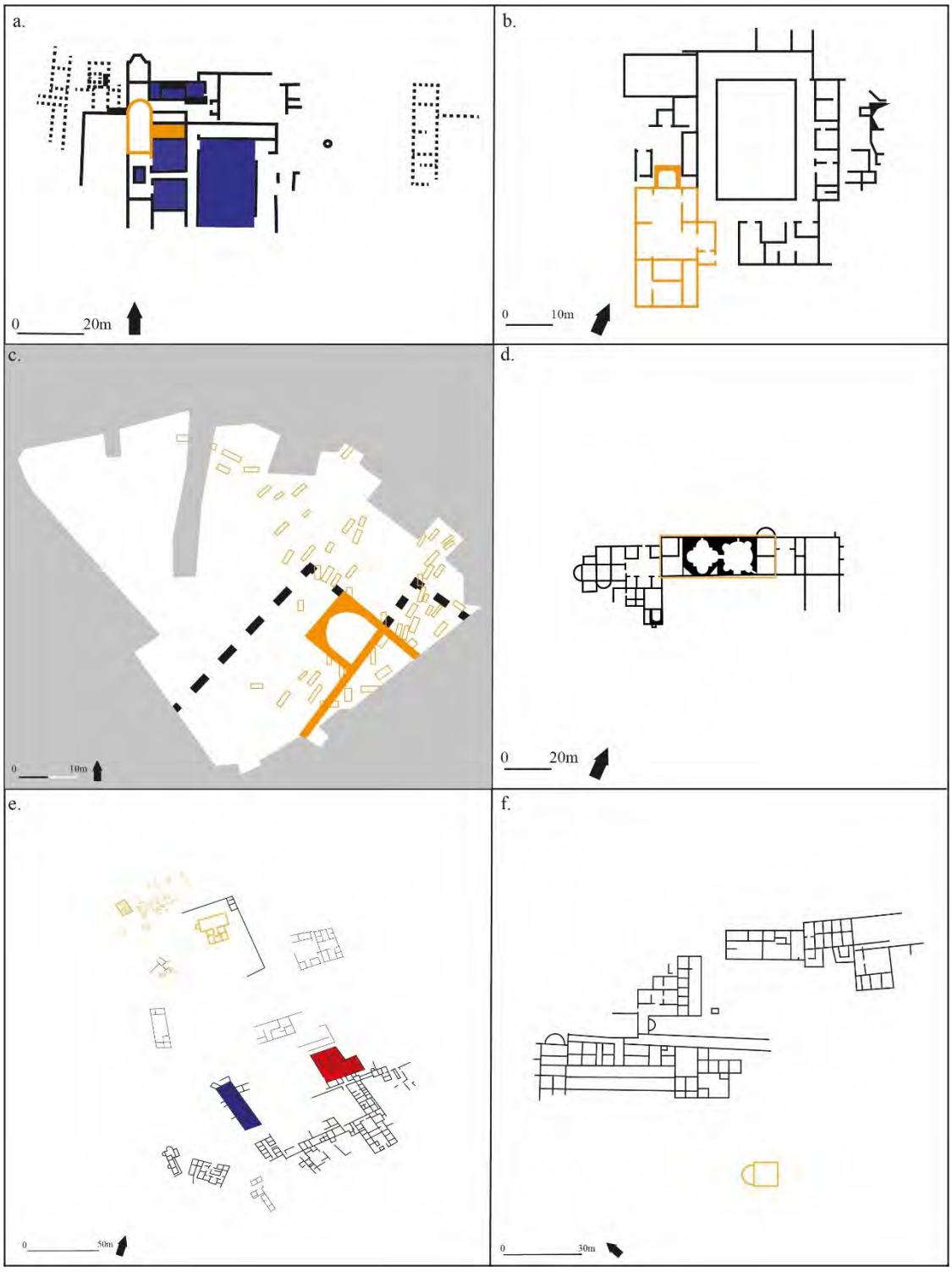

Fig. 5.30: Comparative plans showing structures labelled as cultic building (highlighted in yellow) set with productive and habitational transformation (highlighted in blue and red respectively) in *Gallia Narbonensis* and Northeast *Tarraconensis* contrasted with two Lusitanian sites (e. and f.) often used to support the assertion of Christian influence at villa sites: a. Torre Llauder (Dodd, adapted after Ribas 1972, fig. 1, 14); b. Fraga-Villa Fortunatus (Dodd, adapted after Palol and Navarro 1999, fig. 1, 193 and Serra Ráfols 1943, 14); c. Clermont-L'Herault - RD2/A75 junction (Dodd, adapted after BSR 2004, 126-128); d. Centcelles (Dodd, after Hauschild 1965, fig. 1, 129); e. Torre da Palma (Dodd, adapted after Maloney and Hale 1996, fig. 2, 277); f. São Cucufate (Dodd, adapted after Alarcão, Étienne and Mayet 1989, fig. 7, 248).

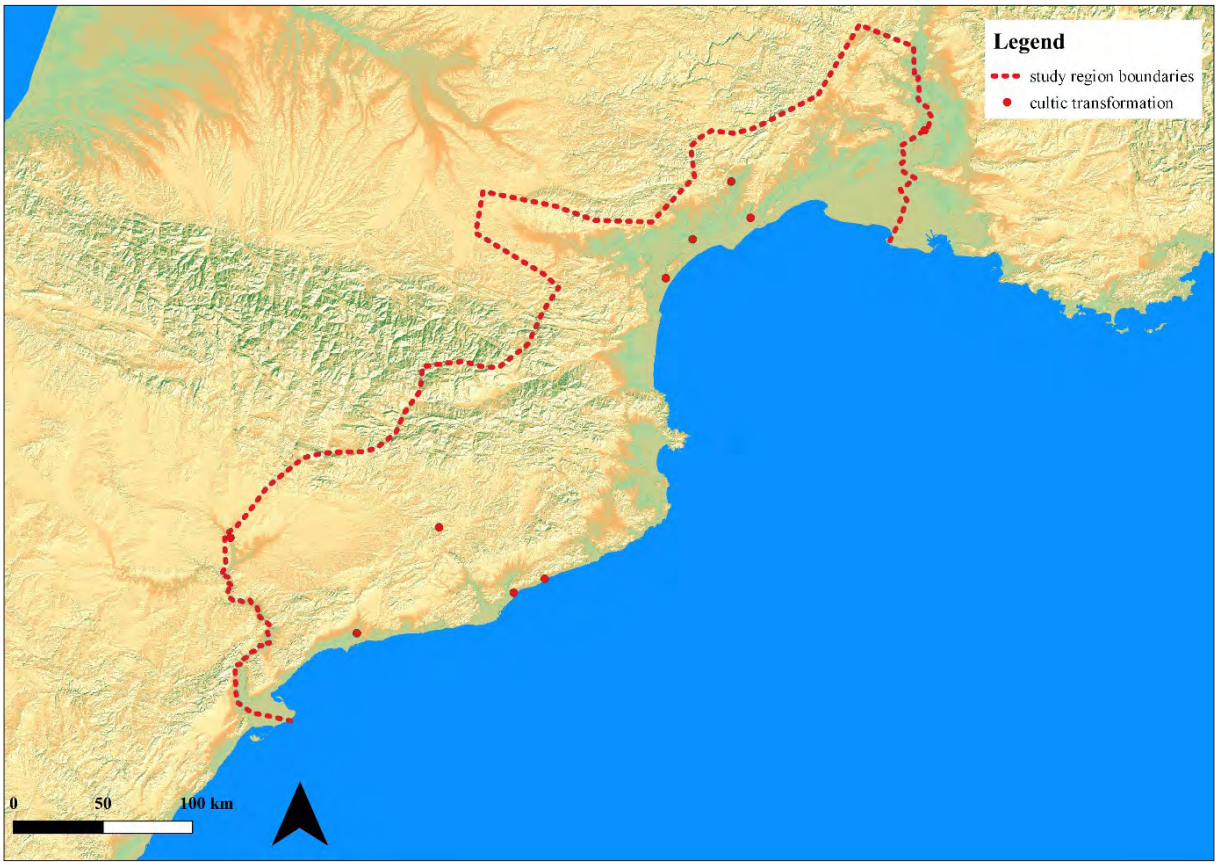

Fig. 5.31: Distribution of cultic transformation at villa sites in the southern study area (J. Dodd).

Although it is not as widespread as expected, there is still a relatively dense penetration of rural cultic use compared to Northwest Europe. Within the data set, there is little evidence for substantial distribution patterns. Cultic-orientated sites comprise only 4.9% of the total number of transforming villas. Where present, these sites primarily cluster along the littoral plain, however; some of the most important sites, such as Fraga – Villa Fortunatus, are located inland and far from important social nodes or urban bishoprics.

The general paucity of cultic transformation at villa sites is somewhat surprising. Traditional views have seen the church as a vehicle for control by rural elites in Late Antiquity (Le Maho 1992; Ripoll and Arce 2000, 74-80), however much of this has stemmed from references from the annals of the first Council of Toledo in 397-400 (canons 5 and 9). Archaeologically, the picture appears to be far less clear in the areas studied in this project. It is possible that the increasing visibility of cultic transformation further south is indicative of an increasing importance of religious use of villas in *Hispania*. However, this is conjectural, and a detailed survey of all villas in the Iberian Peninsula would be required to prove this.

5.4.5c DISCUSSION

Although in the comparative nature of this study cultic transformation is overwhelmingly a feature of the Mediterranean region, it is nowhere near as widespread as initial circumstantial evidence would suggest. Examination of cultic change at sites has generally not been data-driven (for example, Chavarría 2007; Ripoll and Arce 2000). Instead, the data presents a rather light footprint of cultic reuse at villas in North-east *Tarraconensis* and *Narbonensis* rather than the oft-depicted picture of rural elites utilising the church as

a socio-economic powerbase for control of the local landscape. The cherry-picking of sites spread across wide geographical regions by previous studies has painted an unrealistic portrait of the active political use of Christianity in Southern Europe, although there is plenty of evidence for the 'private' use of Christian motifs in mosaics and other architectural elements. The data presented here would suggest that instead, villa owners and their dependents were not utilising the church as a vehicle for power, but rather certain individual owners were acting within personal boundaries to advance their own religious beliefs and provision themselves with easy access to Christian structures, functions and rituals. In some cases, this may have paid off in the long run for aristocratic families, where the church provided a level of returned support in the form of land grants or charters, for example at Centcelles, although such provisions seem to be in a very small minority of surveyed sites.

5.4.6 FORTIFICATION TRANSFORMATION

Fortified transformation at villa sites is totally absent in the data set in *Gallia Narbonensis* and Northeast *Tarraconensis*. There is no site displaying evidence of fortified transformation or any evidence of military artefacts from any site in the study area. It suggests that different factors and priorities were important to rural elites in Southern Europe. Simply put, this can be ascribed to a lack of violent events, social instability, or the perception of insecurity in both regions, which experienced long spells of peace in Late Antiquity. Despite this, there is significant evidence across some regions for other forms of fortified settlement. There is widespread evidence in the pre-Pyrenees for defended sites (Diarte-Blasco 2019, 185) whilst a range of fortified hilltop sites are present. These hilltop sites, or *castroi*, have been variously studied (Tejado Sebastian 2011) and are typo-chronologically similar to *Höhensiedlungen* in the Moselle Valley. Unfortunately, there is little understanding or quantification of these sites and their associated relationship with the transforming villa landscape meaning that little can be said about the transformation and development of fortified facets in the rural landscapes of *Gallia Narbonensis* and *Tarraconensis*. A final group of fortified settlements does exist in the region: the urban centres. Although the dating for many wall circuits is questionable (Esmonde Cleary 2013, 130-131), there is certainly an increase in the level of urban fortifications in Late Antiquity. In the increasingly unstable world of the 5th century, these towns may have played the role of local *refugia* for the rural population, especially in densely occupied areas such as the *Ager Tarraconensis* or *territorium* of Béziers. The presence of larger fortified centres perhaps nullified the need for smaller, semi-private defences.

5.5 (FORMER) VILLAS AND CITIES: THE URBAN-RURAL DYNAMIC

The relationship between the transforming villa and urban centres in *Gallia Narbonensis* and *Tarraconensis* is complex and in places significantly affected by the lack of systematic data on the role played by high-status housing in cities and larger towns. It has been argued that *Hispania* experienced a 4th and 5th-century period of *ruralización*, a process by which political power and representation shifted from the cities to the villa-owning elite (*cf.* Kulikowski 2010, 311-312). Although we now know that the situation is more complicated than this, such views have persisted. *Étiage* and transformation are key elements to urban life across the region from the 3rd century onwards (Heijmans 2011) with little evidence for an increase in high-status elite construction. Indeed, some elite housing appears to have been destroyed or abandoned in the 3rd and early 4th centuries (see Heijmans 1996 for an overview of Arles). Evidence generally suggests a radical change in housing styles from *Narbonensis* between the 3rd and 5th centuries, with *domus*-style housing falling out of style across Southern Gaul (Vipard 2007, 267–271). This shift is

complemented by an increase in more 'haphazard' construction or the conversion of public monuments (Heijmans 2006). In some areas outside the study area, it is easy to reconcile the shift of elite power and function from urban residences to increasingly opulent villas, for example in *Aquitania*. This situation is more difficult to assess in *Hispania*, where evidence is poor. Recent work points towards a mixed picture (Arce *et al*. 2007), with some suburban elite housing at Barcelona. Despite this, there is some evidence of excavation bias in the record as much recording has focused on Mérida, the diocesan capital, which likely provides an exceptional example given the concentration of officials and wealth.

Within the context of this study, it is difficult to establish the urban-rural dynamic. It appears that from the 3rd century there was an increasing shift in elite display. By the 5th century, a significant minority of rural sites were no longer acting in traditional forms of display, whilst there is no substantial evidence for this role having been transferred to the urban sphere. Although this is somewhat simplified; there are significant regional variations such as the *Ager Tarraconensis* - it raises the question of where elite groups were located and how they were interacting with their estates. This is difficult to answer. One credible scenario involves the movement of elite groups to other villas in different regions, for example, the Upper Rhône Valley or *Novempopulana*, whilst it is similarly easy to depict a shift of villa owners on the Catalan coast into the interior of the peninsula. This scenario would involve elites leaving their estates in the hands of *villici* and agents, the majority of whom may not have been overly interested in the maintenance of non-functional and unnecessary infrastructure elements. Shifting elite populations may account for the development of new land exploitation patterns on a regional scale. The lack of a requirement for large, monumental rural habitations and their upkeep shifted the focus of production from large-scale cultivation of crops such as olives to a less intense and more diverse pattern of agricultural exploitation. A great deal of further work is required in this region to develop conclusions on the Late Antique rural-urban dynamic. Necessarily, this requires a greater data set from urban centres, something beyond the scope of this study.

5.6 REGIONAL CONCLUSIONS

Traditionally, *Narbonensis* and Northeast *Tarraconensis* have not been studied in tandem with northern European villa transformation. This division has been driven by several factors that include an academic division between 'classical Mediterranean archaeology' and 'Roman provincial archaeology'. Despite the long-running conventions, it is clear that Late Antique villa transformation is a ubiquitous feature across all regions. Both *Narbonensis* and Northeast *Tarraconensis* experience patterns similar to Northern Europe, although in general, the appearance of villa transformation is between 50 years and a century later than its northern counterparts. There is, however, a significant dearth of dating evidence to much of this. The poor quality of the data, combined with the rich tradition of survey archaeology rather than excavation, hampers analysis. This has made charting architectural change impossible at many sites and leaves only a patchy picture to build analysis on. Naturally, this makes a holistic synthesis of the region somewhat difficult to develop. Despite this, there is clear evidence for *longue durée* occupation across the region. However, this is not as clear-cut as initially expected. There is significant evidence for a more fragmented long-term occupation pattern. Long slow declines in occupation density in all three regions is offset by short 'crashes' affecting all three regions from the 6th century onwards (figure 5.3). The accelerating rate of occupation decline coincides with larger socio-political changes in the Western Mediterranean in the 6th century. Significant socio-economic disruption caused by Justinian's Vandalic and Gothic wars as well as the establishment of Byzantine Spain all affected the socio-economic basis for the villa economy. This decline was expected; however, the regional variation between *Gallia Narbonensis* and Northeast *Tarraconensis* was not. This reflects significant divergence between *Hispania* and Gaul in Late Antiquity. Economic fragmentation and social regionalisation in these regions are key elements in the later development of the villa landscape. Conversely, the lack of significant evidence for immigrant communities perhaps allows us

a greater degree of visibility for the natural evolution of the villa landscape once Roman political control is removed from the equation.

The economic aspects of this are an important element to the *longue durée* survival of the Late Antique rural landscape. Exchange patterns were carried over from the Middle Roman period well into the Late Roman period and beyond. The evidence points towards shifting patterns of production from the late 4th century onwards with the development of a two-tier system of production. One group catering towards local and regional demand and another 'higher tier' group involved in high-level production and consumption of commodities within the empire-wide economic and fiscal system. The data points towards the survival of villas into the Medieval period and suggests that the organic development of the villa system was influenced profoundly by the increasing regionalisation of the economy from the 4th century onwards. The key point is that larger, provincially integrated producers were less likely to survive into the Medieval period than smaller, regionally adapted producers. This points towards a continued trend of regionalisation and the lack of markets for large producers, some of which may have lost out to the developing villages and secondary centres of the 6th and 7th centuries.

Chapter 6 - Regional trends and conclusions

This final chapter brings together the evidence laid out in the previous chapters to develop a series of conclusions based on the individual trajectories of villas in each of the three study regions. This takes the form of two sections: firstly, a comparative section analysing the regional trends and trajectories of the varying forms of abandonment and transformation in its varied forms (*habitational*, *productive*, *funerary*, *cultic* and *fortification*). The second section will seek to elaborate and interpret these trends and build a conceivable model for rural society and the economy before finally addressing future directions for research.

6.1 INTRODUCTORY SYNTHESIS

The preceding chapters have treated each region under study in isolation. Naturally, this analysis has left out comparative trends and supra-regional trajectories, something further explored in section 6.2. This study has combined sites spread across *Britannia*, *Gallia Belgica* and the Germanic provinces and *Gallia Narbonensis* and Northeast *Tarraconensis* and this section comprises a comparative analysis between the regions under study with a significant degree of integrative statistics and analysis. This chapter will address key trends across all three study regions. Firstly, it will question the economic basis for the transforming villa economy. This addresses the essential role that villas, as producers and consumers, have for the larger economy of the Roman West, both in the supply and demand cycle and the development and eventual failure of the *solidus* economy in the western provinces. Secondly, the changing nature of rural society will be examined through the context of the villa. The architectural changes apparent in the built fabric of villa complexes is a manifestation of some level of change of social priorities. This section introduces the three interest groups of the Late Antique countryside: elite groups, non-elite groups, and immigrant communities. It will provide a convincing model for the development of these new Late Antique and post-Roman societies and their demise in the new world of the Early Middle Ages. Related to shifting societies, this chapter will also address the role, scale and importance of migration in the regions under study from an archaeological perspective. This separates the contextual background of Northern and Southern Europe and addresses each area separately, examining the impact of 'Germanic' migration into the regions under study. It will provide a concise and clear assessment to the impact of migration on the Late Antique transformation of the villa landscape and its eventual demise. The final section will address the transformation of funerary traditions in the transforming landscape. This key development shifts the focus of burial from the classical taboo between life and death towards a more haphazard arrangement. The social implications for this are explored and the reasoning and scale of the phenomenon investigated.

6.2 VARIABLE TRENDS AND REGIONAL TRAJECTORIES

Section 6.2 provides a comparative analysis of regional trajectories through the individual comparison of different facets of transformation across all regions, one of the aims of this study. It demonstrates the wide variability across regions and settlements and draws together data presented in chapters 3, 4 and 5.

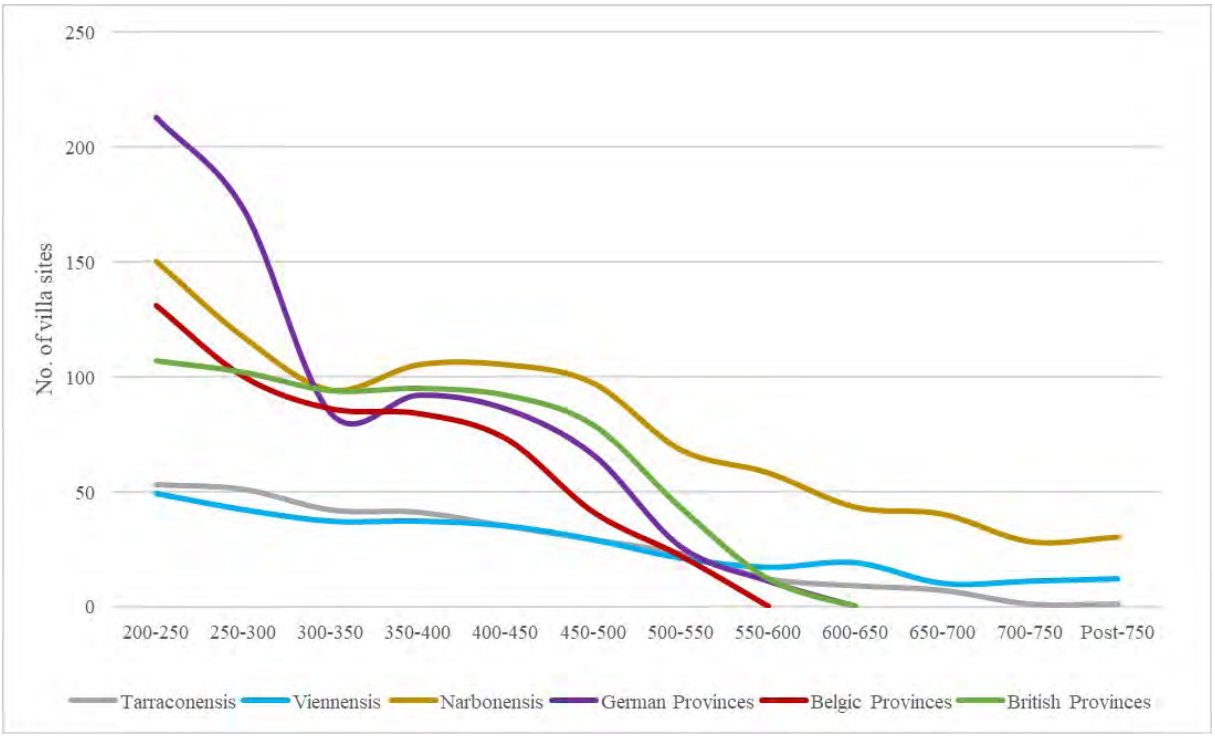

Fig. 6.1: Comparative occupation trajectories of villa and former villa sites for the areas studied in this thesis in the Late Roman period (J. Dodd). (*n* = 730).

6.2.1 REGIONAL COMPARISONS

6.2.1A COMPARATIVE ABANDONMENT TRENDS

This study has defined abandonment as the process by which occupation at villa complexes ceases for long periods of time (see section 2.10). There is significant variation in occupation trajectories prior to abandonment in the provinces under study. This is illustrated in figure 6.1, which demonstrates the primary divide between northern and southern contexts. This division was not completely expected within this data set. The regional breakdown has never been demonstrated with data-driven modelling within such a uniform framework. The division is stark with very few Northern European sites lasting into the 6th century; only a few isolated examples, such as Frocester Court have significant post-Roman phases. The three southern provinces present a vastly different picture. Although there is evidence of a slow decline in numbers from the 5th century onwards, the evidence suggests that occupation rates remained relatively stable until a crash and recovery phase in the late 7th century. This reorganisation phase resulted in a decline of remaining villa sites in *Tarraconensis* and somewhat unexpectedly, a patchy recovery in occupied villa sites in parts of Southern France, such as the Bitterois. This important divide, now demonstrated through rigorous data collection, is one of the key element to this study, marking out the littoral areas of Southern France and Northeast Spain from more peripheral areas to the north.

The most notable feature when drilling into the data is the decline in villa density in *Germania Secunda*. The 3rd century decline and trough in settlement occupation is statistically significant on a supra-regional scale and represents the clearest individual trajectory in the data set. Its importance is relayed by the dominating percentage of total sites in the region. No other regions experiences such a severe decline in density during the 3rd century and although it might not represent the complete collapse of the villa system north of the *Via Belgica*, it does mark a sharp decrease in the number of sites and therefore the

ability of the villa system to function in this region. *Germania Secunda* is also unique in being the only region that experiences an, admittedly slight, recovery in the provincial density of villas in the 4th century. No other region experiences anything like this. This, rather surprisingly, includes *Britannia*, where density patterns stabilise rather than increase, although this is sub-regionally variable and somewhat dampened in the data curve. However, when taken with the evidence laid out in chapter 3, it suggests that the traditional view of a 'renaissance' might be somewhat patchy across the diocese. Notably the peak of intensity in *Germania Secunda* occurs in the second half of the 4th century, after the stabilisation of villa densities in *Britannia* before both regions experience an early 5th century crash. The crash experienced by all regions in the northern provinces in the early to mid-5th century is not universally the result of a sudden decline. Some regions, such as *Belgica* experience gradual declines of occupation from the 3rd century onwards, with the beginnings of more dramatic decline beginning in the second half of the 4th and early 5th centuries in most regions.

6.2.1B COMPARATIVE TRANSFORMATION TRENDS

Late Antique villa transformation in all its forms[27] appears in every study region and it is temporally spread from the late 2nd or early 3rd century to the late 6th or early 7th century. This is illustrated in figure 6.2. Two peaks of intensity stand out from this chart: firstly, in the first quarter of the 4th century and secondly in the final quarter of the 4th century. The first of these two peaks, dating from the first quarter of the 4th century, is generally a phenomenon spatially anchored in Northwestern Europe, with little or no transformation occurring in the Mediterranean study region, lending credence to theories concerning the consolidation of the villa landscape in the Mediterranean littoral (Chavarría 2004, 69-70). The effects of this transformation peak are more intense closer to the Rhine, with parts of *Britannia* and *Belgica Secunda* experiencing little or no significant disruption or change. This peak has previously been noted for *Britannia* (Dodd 2014, 32, figs. 8 and 9) and assumed, despite the lack of evidence, to have existed in *Belgica Secunda* (Agache 1978). This peak has been interpreted in previous studies to have been related to the wider reorganisation of exploitation patterns (Lenz 2001, 124-128 for the Aldenhoven Plateau; Chavarría 2004 for limited evidence in *Hispania*) and the disruption of the rural landscape in the second half of the 3rd century (Gilkes 1998; Heeren 2015 for examples). Wider analysis indicates that in actuality, a *time lag* is present in the data with transformation peaking in the first decades of the 4th century rather than the end of the 3rd century. This also corresponds with the reoccupation of villa sites in the Germanic provinces, the majority of which were undertaken in a radically different style of occupation characterised as 'squatting'.

The second peak of activity in the last quarter of the 4th century is universal across the Western Empire. All provinces experience their most intense or equally most intense periods of transformation in this period, marking it out as a period of significant shifts in the architectural fabric of villa buildings across widely diverse regions, socially, economically, and geographically. This period is the peak of a longer spread of steadily increasing transformation from the middle of the 4th century across almost all regions and correlates with the continuity of transforming sites across the 4th century. This peak suggests that universal socio-economic changes were occurring in the Roman Empire, of which the shifting styles of occupation at villas in the second half of the 4th century are one manifestation. Southern Europe experiences a slightly different trajectory of transformation in figure 6.2. Generally, there is a trend in *Narbonensis* and Northeast *Tarraconensis* for transformation to appear later than in Northern Europe, with

[27] *Habitational*, *productive*, *funerary*, *cultic,* and *fortified*, set out in section 2.5

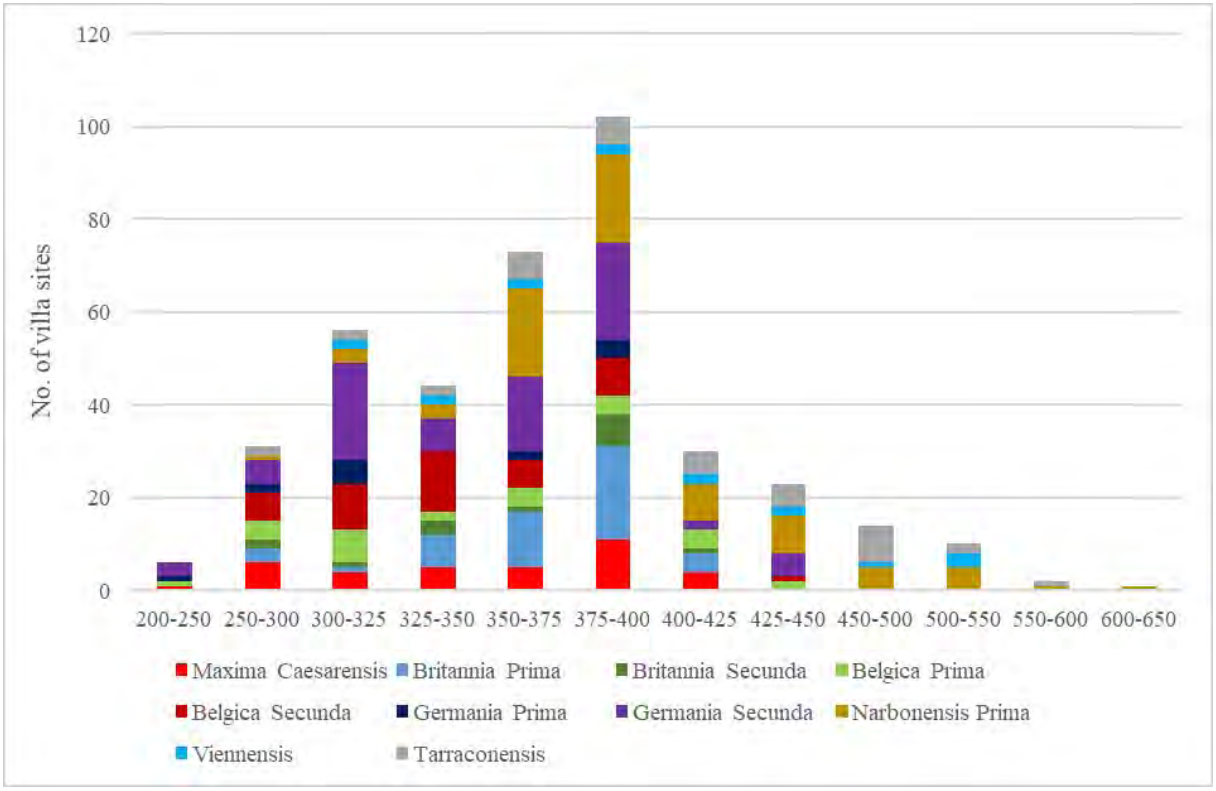

Fig. 6.2: First appearance of Late Roman transformation at villa sites in the study regions, divided by province (J. Dodd). (*n*=385).

little 3rd or early 4th century change; this is coupled to a stronger phase of transformation later than sites in Northern Europe, with a particularly strong pulse of transformation in the early 6th century. The appearance of new transformational contexts at villa sites in the early 6th century contrasts strongly with Northern Europe. The few sites that do continue are mostly located in *Germania Secunda* and related to incoming migrant communities.

The final point illustrated in figure 6.2 is the presence of a small group of sites demonstrating transformation prior to 250. Transformation is a key part of any landscape, for example, the development of the villa landscapes of the northwest provinces (Habermehl 2014) is itself a process of transformation. In this case, transformation between 200 and 250 explicitly refers to the sites entering a trajectory of change morphologically similar to Late Antique villa transformation. This small but interesting group of sites is spread across a variety of regions, both in Northern and Southern Europe and it temporally stretches from the late 2nd to mid-3rd century and has been noted in previous studies (Lewit 2001, 251). This tantalising hint suggests that transformation is not solely a Late Antique phenomenon. It points towards a long-term development in the rural landscape that occurs, albeit in smaller numbers, through both the economic systems of the Middle and Late Roman periods. The deep roots of this phenomenon in the Middle Roman period indicates that even at the supposed zenith of its power and socio-economic prestige, all was not well with the villa system. These structural problems: economic vulnerability and societal change and the changing role of the elite may have begun to become apparent by the early 3rd century. It is tempting to connected these structural problems to the exploitation of elites by the Severans, who proscribed wealthy people to seize their money, as reported by Cassius Dio (Cassius Dio, *Roman History*, 74.8.4-5), however, this direct link cannot be easily proven.

6.2.1c Comparative reoccupation trends

Reoccupation is the process by which sites are reutilised for new settlements after a time gap during which the villa was abandoned. Despite the apparent ubiquitous of abandonment present in figure 6.3, there is a significant degree of variation present in the data. High abandonment rates are present at two points in the chronological sequence; 200-325 and 375-425. These peaks of intensity are widespread and regionally varied, for example, the first peak is primarily made of up of sites in Southern Gaul, with its latter stages accounted for by the depopulation of the northern zones of *Germania Secunda*.

Reoccupation itself is broadly minor element within the larger villa landscape, with only 15.62% of sites demonstrating some level of reoccupation after their initial abandonment phases. Despite this, it does have some significance at the regional level; however, these nuances are lost at a lower resolution of analysis (figure 6.3). Two general peaks of reoccupation are notable in figure 6.3. The first peak dates to the first half of the 4th century, where a statistically significant recovery of site occupation is notable. For a brief period, villa complexes undergoing reoccupation outstrip sites being abandoned. This spike in intensity is underpinned by the recovery of settlement patterns in *Germania Secunda* in the early 4th century (figure 6.1) and it seems to represent the stabilisation of new dynamics in the northwestern continental provinces rather than a widespread sustained stabilisation across all regions. This 4th century peak is complemented by a second spike in intensity in the early 5th century, although this marks the end of a longer 4th century period of low-intensity reoccupation rather than a distinct statistically significant peak in reoccupation patterns. Reoccupation of villa sites is broadly a Late Roman phenomenon and is generally not something that was part of the post-Roman socio-economic experience in the countryside.

The general dearth of post-Roman reoccupation phases at villa sites is indicative of other settlements developing *in lieu* of the fundamental lack of high-status rural settlement system. Where reoccupation is present, it is dominated by cemeteries. This indicates that the central function of the villa complex, the production of agricultural products, was no longer applicable. Reoccupied villas played the role of socially important focal points for burial rather than productive centres. Instead, other settlements took the place of the villa as the driver of society and the economy in the Post-Roman countryside. These sites are initially difficult to detect, and we do not have an archaeological grasp on their location or importance. The ephemeral nature of early Post-Roman rural settlement makes it extremely difficult to build up a picture of the initial development of the landscape. By the 6th and 7th centuries, a tier of new settlements, such as the Visigothic and Frankish royal estates and the later 8th and 9th Umayyad *Munya* appear to occupy the niche formerly inhabited by the villa. Surviving Roman villa sites were generally marginalised with their status 'relegated' prior to final abandonment trajectories.

6.2.2 Transformational comparisons

6.2.2a Habitational transformation

Habitational transformation is the most common form of change in all study regions. This category consists of a diverse range of archaeological features, including everything from wooden structures to the conversion of high-status rooms through changing occupation layers and hearths. It appears in both the northern and southern study regions at relatively intense levels. Notably, there is little or no change in the morphology of newly introduced features associated with this form of transformation, with similar architectural morphology from Northern *Britannia* to *Tarraconensis*. This section will synthesise the data from all study zones, whist an interpretative model for this will be developed in 6.3.2.

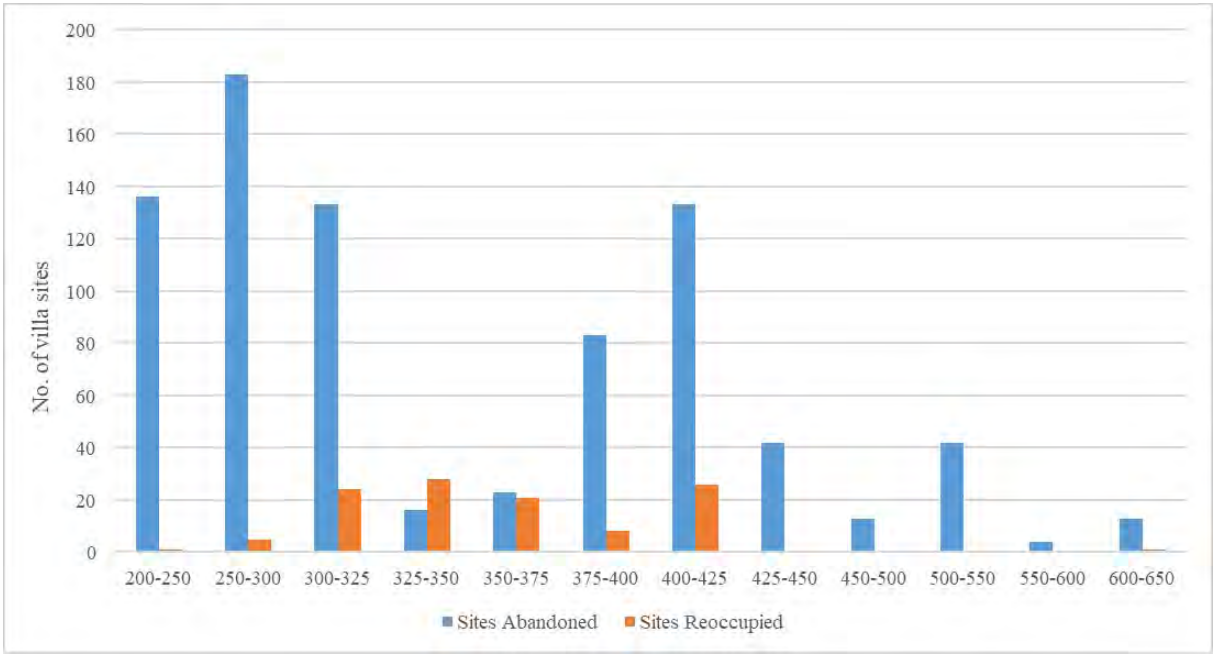

Fig. 6.3: Comparative abandonment and reoccupation for the areas studied in the Late Roman period (n = 730) (J. Dodd).

6.2.2a.i Northern European contexts

Habitational transformation is a key element to the social changes apparent in the northern provinces in Late Antiquity. It first appears in the late 2nd century and finally fades away in the mid-5th or 6th century. Its appearance is not uniform across this period but experiences several pulses of intensity. The two most important phases of intensity date to the late 3rd-early 4th century and the period 375-400 and are felt across all three wider diocesan regions (see figure 6.4).

The Belgic and Germanic provinces and the three British zones act in tandem. Although it is most pronounced in the two Germanic provinces, each region undergoes a 'double dip' period, with a reduction in average habitational occupation in the middle of the 4th century AD. The appearance of these features in the data set in two separate peaks of intensity suggests that this form of architectural expression is a tried and tested method to dealing with socio-economic stress at villa settlements and that the episodic outbursts of habitational change have the same underlying cause at different times.

Several elements of the chrono-spatial distribution of habitational transformation are of significant interest. Firstly, it is notably on a general level that the intensity of the phenomenon increases towards the south and east, with the Germanic provinces experiencing the most intense phases of habitational change. This is perhaps related to the proximity of the provinces to the *limes* on the Rhine. The perceived insecurity and socio-economic stress felt in these border regions conceivably influenced the development of habitational change and may have prompted the initial shift towards habitational transformation as a social strategy. Secondly, considering the first peak of intensity between c. 250 and c. 325, the phenomenon develops from north to south. It begins in *Britannia* in the middle of the 3rd century and appears to spread southwards until the early 4th century when it appears in archaeologically visible quantities in the Germanic provinces. This southwards migration of the phenomenon is matched by a radical increase in intensity between *Britannia* and the Germanic provinces over the same period. The significant spiking of habitational activity in the second half of the 3rd century across all regions does indicate that this is not simply a statistical anomaly or an isolated phenomenon to one diocese, but a widespread structural element to elite society in the northwestern provinces.

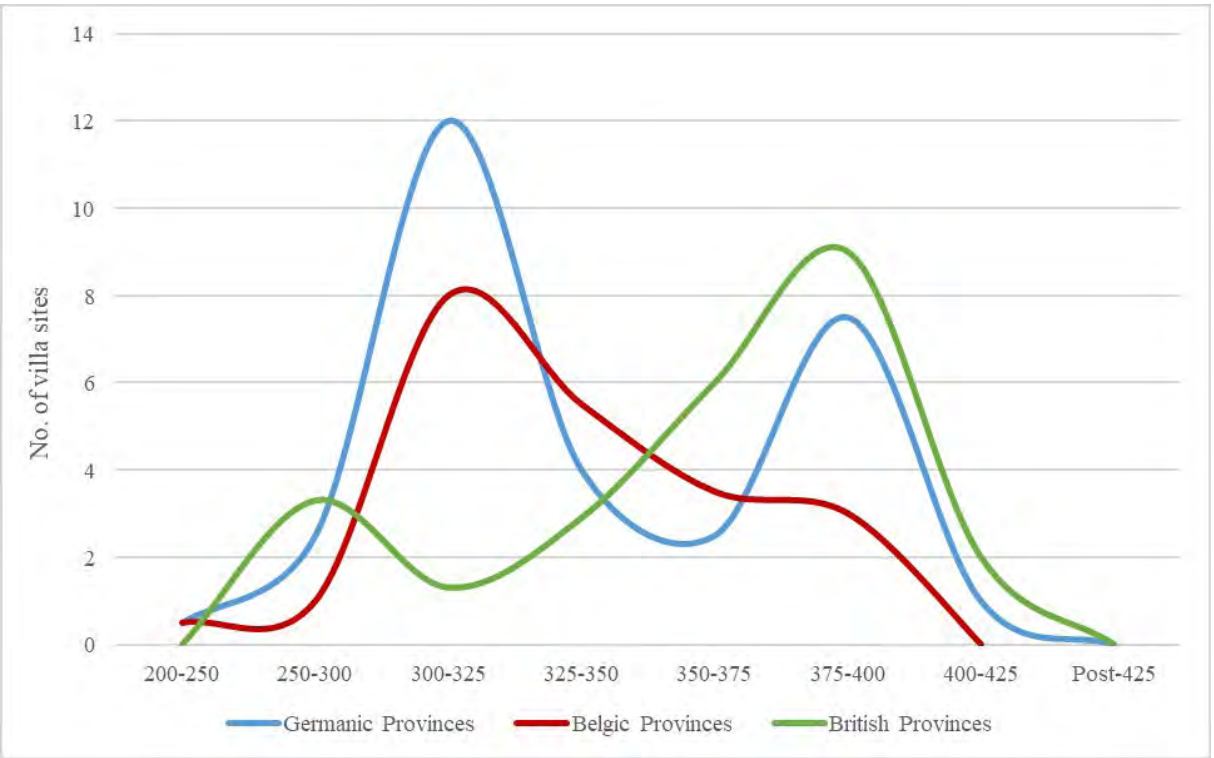

Fig. 6.4: Average temporal appearance of the first occurrence of habitational transformation in the northern provinces (J. Dodd).

6.2.2a.ii Southern European contexts

Habitational transformation is the most common form of change in the southern study zone and is a common theme throughout Late Antiquity. It first appears in the second half of the 3rd century, with each region experiencing two key pulses of activity, similar to the situation in Northwestern Europe (figure 6.5). The two most important phases of intensity date to the late 4th century and second half of the 5th century and are felt across all three wider diocesan regions (see figure 6.5).

All three provinces under study experience two spikes of activity; this is most pronounced in *Narbonensis Prima*, although this partly is due to the larger evidence basis in this region. The repeated appearance of habitational change in two peaks is indicative of a method of dealing with social and economic stress. This 'double dip' chrono-spatial arrangement is broadly similar to the situation in the northern provinces (set out in figure 6.4). There are, however, significant differences. All three of the southern provinces bear remarkably similar patterns of intensity and decline. Both *Viennensis* and *Narbonensis Prima* experience widespread and sharp increases in habitational transformation over the course of the 4th century, peaking in the period 350-400. This spike coincides with the wider disruption of social networks in Gaul and perhaps can be related to this. Only *Tarraconensis* experiences a different trajectory. Instead of a sharp increase in habitational transformation, the evidence suggests that the region experiences a slow and stable increase in this type of transformation, peaking in the second half of the 4th century. This indicates that the phenomenon that caused intense cycles of habitational change in Southern Gaul was not present in *Tarraconensis*. It is difficult not to tie to this to barrier of the Pyrenees and the role played by the Spanish diocese in acting as an outlet for a different cycle of social interaction and consumption, somewhat divorced from the situation in Gaul.

A second peak of transformation coincides with the end of Roman political control over the region: broadly in the second half of the 5th century. This period suggests that the villa in its traditional form was undergoing a significant period of flux and that Romanised expression increasingly became irrelevant

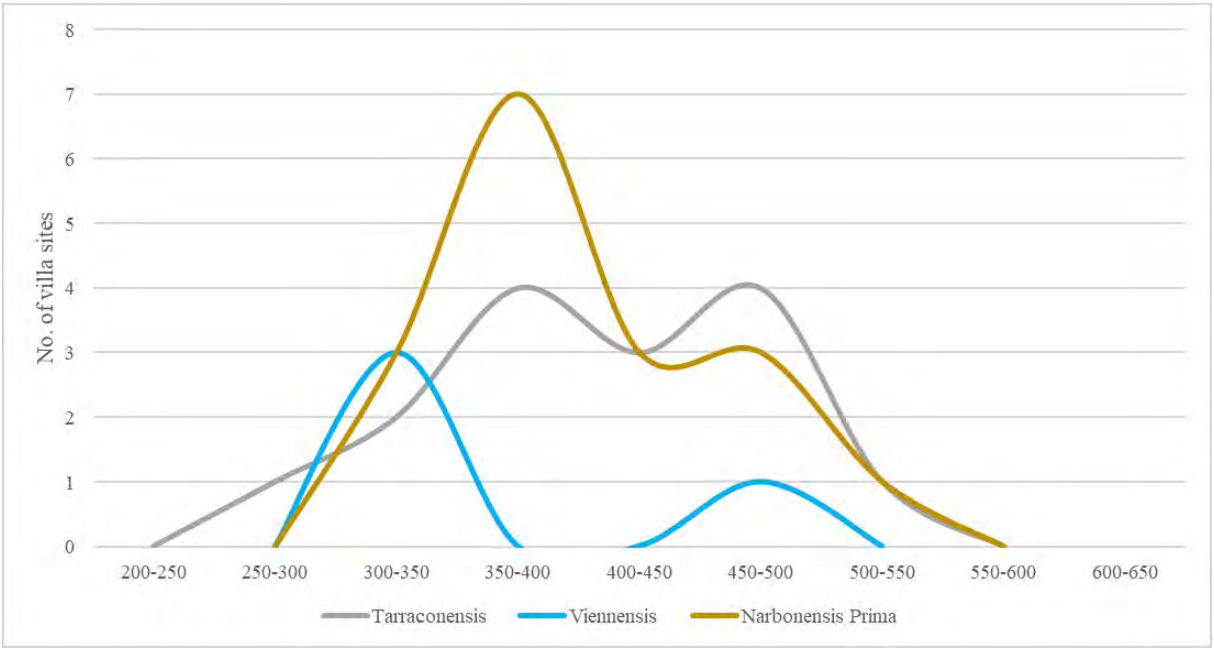

Fig. 6.5: Average temporal appearance of the first occurrence of habitational transformation in the southern provinces (J. Dodd).

to the villa owning elite in the region. This coincides with a period of significant change with several conflicting 'Germanic' groups establishing autonomous states in the region. Notably, new instances of habitational transformation beginning essentially cease by the middle of the 6th century, suggesting that this social strategy was no longer viable or sustainable in a world dominated by different forms of socio-political expression and fundamental shifts in the economic system.

6.2.2a.iii Synthesis

The most important point illustrated in a comparative analysis of habitational transformation trends is the similarity between northern and southern villa landscapes. Every sub-region experiences two similar spikes in intensity. This indicates that the same patterns are present in two distinct contexts and points towards a tried and tested formula for the development of new social strategies in transforming villas. The overwhelming indications from figures 6.4 and 6.5 is that habitational transformation is an established expression for dealing with socio-economic stress in the countryside. The initial periods of transformation: the early 4th century in the north and the late 4th century in the south, coincide with periods of stress and recovery. Primarily this takes the form of the reorganisation of exchange networks and associated social dynamics in each region (Millett 1990, 157-170; Esmonde Cleary 2013, 28-30). The second spike in activity: in the late 4th or early 5th century in the north and the late 5th century in the south, roughly coincides with the end of formal Roman political control. This suggests that habitational transformation is, to some degree, the archaeological representation of a social strategy designed to deal with a certain threshold of societal stress. This stress could take many forms; for example, the shifting trade networks blocking access to high-status goods or the withdrawal of a key consumer of resources, such as the army, could adversely affect the villa landscapes of one region.

Habitational transformation as a social strategy appears to have worked in the first instance in both northern and southern regions. Occupation at villa sites continues and, in some cases, such as *Britannia*, there is evidence for a reversion back to more Romanised forms of architectural expression. This is most apparent in *Maxima Caesariensis*, where a range of sites see bath houses and high-status rooms recommissioned (for example Eccles, Detsicas 1968). What this means for the role of the elites is difficult to say.

Elite groups were probably interacting with these recommissioned sites which may represent the new shifting patterns of town-country dynamics. This is further explored in 6.3.2. The strategy of transformation appears to have worked in the first instance; however, this is not the case after the second spike. The second peak of intensity is clearly linked to the broader period around the breakdown of Roman control. Both regions pass out of the broader Roman political orbit in the period of the second spike in intensity. The presence of this spike at this point indicates that the withdrawal of the Roman administration, probably combined with economic factors such as the end of the tax pay cycle and the loss of critical wider markets such as the army, triggered some kind of stress threshold. Beyond this point, habitational transformation was no longer seen as a viable strategy with very few sites entering a transformation trajectory after the end of Roman political control. The indication from this is that the social aspects of this facet of transformation were no longer resilient enough to survive without the influences of the Roman political administration.

Providing a broad narrative for habitational change is difficult. Clearly, habitational transformation is a vibrant background element to the Late Antique rural landscape; however, it only appears to be a viable strategy for social survival when the overarching administrative-military system of the empire is in place. A second utilisation of this strategy during the collapse of Roman rule appears to have failed as a widespread survival strategy and questioning the reasoning behind this is important. It is indicative of a strategy intimately tied to the exchange and social networks of Roman rule rather than the fragmenting and fluctuating social networks of the early post-Roman kingdoms. The increasing decline of habitational change into the post-Roman period does point towards new populations and new social hierarchies developing separately from the increasingly irrelevant villa complexes, although in many cases these new social constructions and settlement patterns are archaeologically still invisible.

6.2.2b PRODUCTIVE TRANSFORMATION AND REGIONAL ECONOMIC OUTPUT

The economic reality at transformed and transforming villa complexes has been poorly examined and consequently is poorly understood. Productive transformation is the conversion of formerly non-productive zones of villa sites to economically productive uses. This includes a vast range of activities including agricultural storage, metalworking, and glass production. This section will analyse the combined data sets with an interpretative model constructed in section 6.3.1.

In the light of regional large-scale data analysis, some light can be shed on the total economic output of these sites in Late Antiquity. The most important point, demonstrated in figure 6.6, is that the villa landscapes of the studied regions of the Western Empire remain key elements in the cycle of production and consumption. There is clear evidence that villas were still a part of the wider system of rural production. The majority of productive change takes the form of storage and production apparatus for the processing of bulk arable resources, especially in the northern provinces, where *Britannia* acted as a regionally important grain basket for army supply on the Rhine (Zosimus 3.5.2; Amm. Marc. 18.2.3; *cf.* Heeren 2018). The relevance of arable production is somewhat biased in this data set because it was impossible to incorporate archeobotanical and archaeozoological data into analysis without significant reassessment of the primary source material. Despite this, there is clear evidence in figure 6.6 of a shifting pattern of production at villa sites. Metalworking, leatherworking, glass, salt production and bone or antler processing are all common elements to the wider transformation of production at villa sites. Although craft and artisan activity were practiced at villa complexes in the Early and Middle Roman periods, the important change in Late Antiquity is the increase in scale, both at a regional level and at individual sites.

The diversification of production at villa settlements away from integrated arable production towards a host of other crafts represents several important features in the Late Roman rural economy. The breakdown of intra-regional trade and distribution networks coupled with the declining productive function

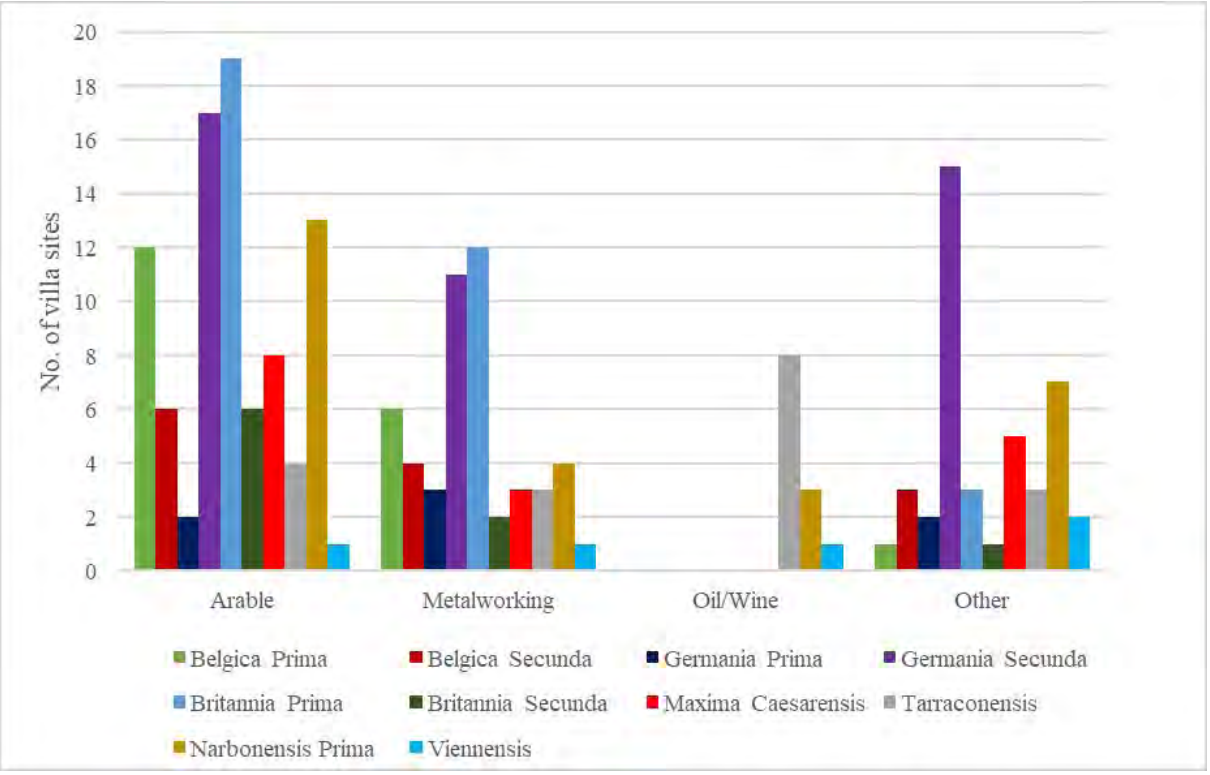

Fig. 6.6: A specification of productive activities at Late Antique villa sites by province and class of activity where data is available (*n*=191) (J. Dodd).

or abandonment of *agglomerations secondaires* (Petit and Mangin 1992 for Northern Gaul; Smith 2018 for *Britannia*) resulted in reactive measures from rural producers in the regions under study. Villa operators and managers were forced to confront a new reality and adapt to producing their own commodities. This is especially pertinent for some regions in light of the continuing localisation of military supply networks (Collins 2019), which in effect boxed out long-distance supply of bulk agricultural goods by villas deep in the hinterland of the *limes*.

The diversification of villa production is illustrated in figure 6.7, which highlights the temporal trends of change across the study regions. The key feature of this is the widespread appearance of transformation across all regions during the course of the 4th century. Although there is evidence, especially in the southern study region, of post-Roman productive transformation, the majority of change comes in the 4th century. This is most apparent in the largest sub-sets of data: *Britannia Prima* and *Germania Secunda*. Equally, this illustrates the changing patterns of rural craft and industry with significant clarity. Both regions experienced a productive shift, beginning the late 3rd century. A wide range of secondary centres were abandoned on the northwest continent (Esmonde Cleary 2013, 141-142) whilst British roadside settlements lost much of their economic functions (Allen *et al*. 2017, 185-186). The evidence points towards a rapid increase in local production from villas at the same time, or in some cases with a short time lag into the early 4th century. This correlation links the two phenomena together and is supported by less clear evidence from *Gallia Belgica*.

This important shift in the focus of production from secondary centres to transforming villas points towards a second key issue; the diffusion of production and the localisation of markets. Market localisation refers to the process by which producers support a smaller consumer base and gear production towards this rather than a larger supra-regional supply chain. This process is an important element in the shifting *milieu* of the villa landscape in Late Antiquity and is linked to diversification. This implies a greater level of self-sufficiency at villa sites and to some degree, insulates their economic activities from wider

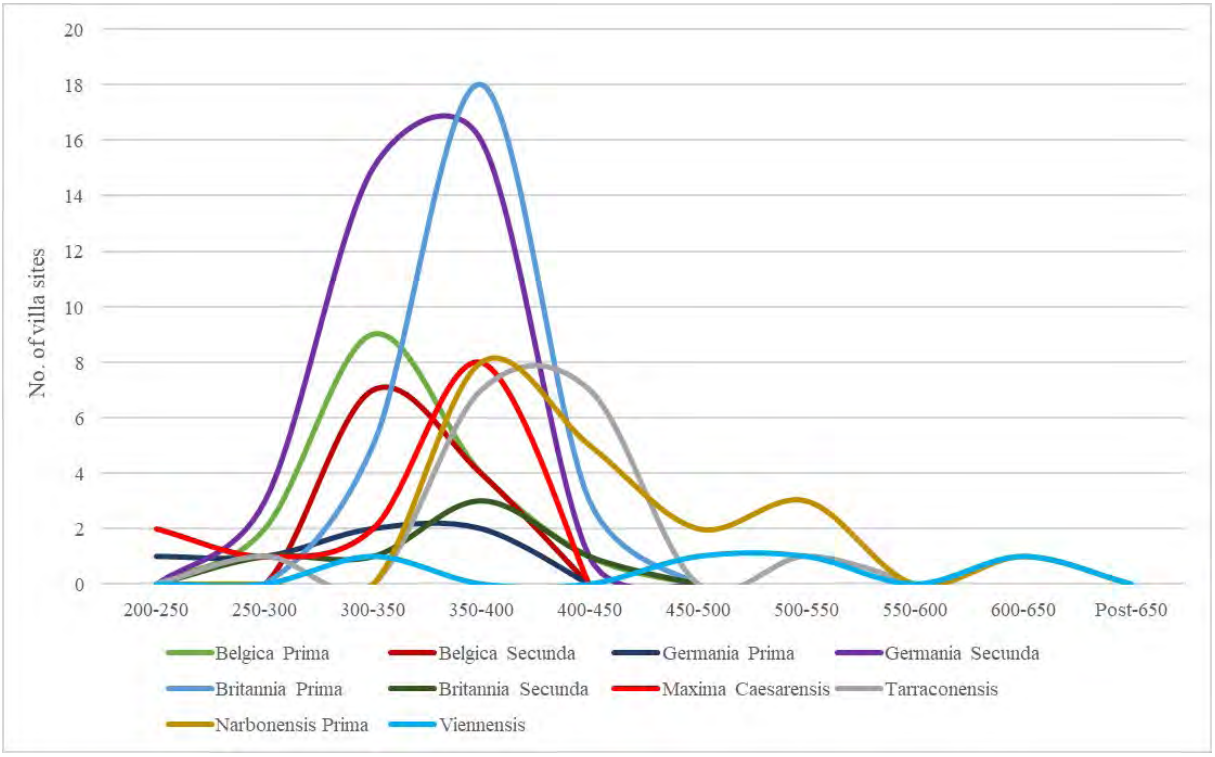

Fig. 6.7: First appearance of Late Roman productive transformation at villa sites in the study regions, divided by province (n=152) (J. Dodd).

changes in the supra-regional production and consumption cycles. The lower output of a multitude of goods and products was both a cause and a consequence of the decline of inter-provincial trade. More localised production resulted in less of a requirement for transport for bulk products. This manifests itself through shifting production foci at villa settlements with the data presented here painting the picture of a fragmented economic landscape, dominated by small-scale producers acting on a regional level.

These changes in the rural economy are important and represent a key change in the economic function of the villa in Late Antiquity. The economic basis for the villa landscape experienced significant disruption and prompted widespread adaptive measures. These shifts are important and represent a key change in the make-up and economic role of villas in Late Antiquity. The economic basis of the villa landscape experienced significant disruption and prompted the necessary shifts in production at individual sites. The transformation of villa complexes does not necessarily result in a drop in the production of resources across all study regions, but it does indicate that there was an overall drop in total economic output from the studied regions. The significant regional variation apparent in the data suggests that some regions, such as *Britannia* saw an increase in bulk agricultural goods such as cereals, in some cases at the expense of 'Romanised' buildings whilst other regions, such as northwest Gaul see increasing diversity of economic activity in the same period. The whole narrative of economic activity at transforming villa sites cannot be summed up simply as a collapse of production but rather a reaction to the changing nature of key production and consumption cycles and the shifting priorities of the largest consumer of resources: the state.

The use of villa complexes for funerary purposes is a wide-ranging part of the wider change of villa centres in Late Antiquity and the Early Medieval Period. This encompasses two typological broad groups of burials; firstly, an individual or small group of graves, often unfurnished and generally dating from the 3rd to the 5th century (Dodd 2020), and secondly a group of larger migration period cemeteries with lavishly furnished graves generally interpreted as 'Germanic' in origin. This section will set out to synthesise the data presented in earlier chapters and establish a supra-regional model for the development of funerary transformation at villa sites whilst the interpretation of this will be made in 6.3.4.

6.2.2c.i Northern Eeuropean Contexts

Generally, the data from Northern Europe has been of higher quality, although this not a universal trend. An appreciation of funerary development at villa complexes has been a long-term element to the study of transformation (for example, Schuermans 1878).

Spatially, this data is dominated by *Germania Secunda*, somewhat naturally given that it is the largest province in the study area (figure 6.8), although a second region, *Britannia Prima* also contains a comparatively large amount of funerary evidence. It is noticeable that both Belgic provinces and to a lesser extent *Maxima Caesariensis* experience a lesser intense form or funerary transformation. This smaller footprint indicates that the phenomenon of burial use at villa sites was confined to the northern and western zones of the northern provinces. The utilisation of villa complexes for funerary purposes was uncommon in *Belgica* and *Germania Prima*, despite the long tradition of integrated cemeteries in the Middle Roman period (Krier and Henrich 2011). It also indicates that the situation in Central Gaul, Normandy and the district of the *Bituriges Cubi* may have been somewhat different and *Germania Prima* and the Belgic provinces may be part of this wider zone where funerary transformation is something of a less intense phenomenon.

Beyond simple spatial analysis, the reasons behind this distribution are complex and poorly understood. It is possible that the long-running tradition of the use of infant burials in buildings in *Britannia* (Millett and Gowland 2015) may have spurred the development of small-scale adult burials groups in Late Antiquity. It does, however, demonstrate that diverse populations spread across a large region were acting in recognisably international ways and utilising similar forms of burial expression on a wide canvas. The larger 'Germanic' cemeteries present in this data set are explored more thoroughly in 6.3.3 and 6.3.4.

The site topography of transitional burials at villa sites is a poorly studied topic with little or no clear patterns. Traditionally, burials have been assumed to have been placed into the villa buildings (Lewit 2003, 253 for example). Partly this has stemmed from the lack of a data-driven tradition in the study of transitional burials and partly from the assumption that these burials were related to post-abandonment activities. The spatial distribution of transitional burials at villa sties (figure 6.9) points towards a different reality. There is significant variation in the intra-site location of burials with a clear preference towards burying individuals in open space between and around buildings or in courtyards. Only two provinces, *Britannia Secunda* and *Belgica Prima* buck this trend; both areas are outliers to the wider rural *milieu* of the northwestern provinces and have significant evidence for other influences and traditions. The data set located in the wider villa terrain includes burials in the courtyards of villa complexes, for example the Late Antique double burial at Langton (Kirk and Corder 1932), or the wider area of the villa, for example the two graves at Ewijk – De Grote Aalst (Blom, Van der Feijst and Veldman 2012, 275-283). In cases where burials were placed inside villas, such as Kingscote and Schwirtzheim, there is an overwhelming trend towards the use of domestic or formerly domestic spaces.

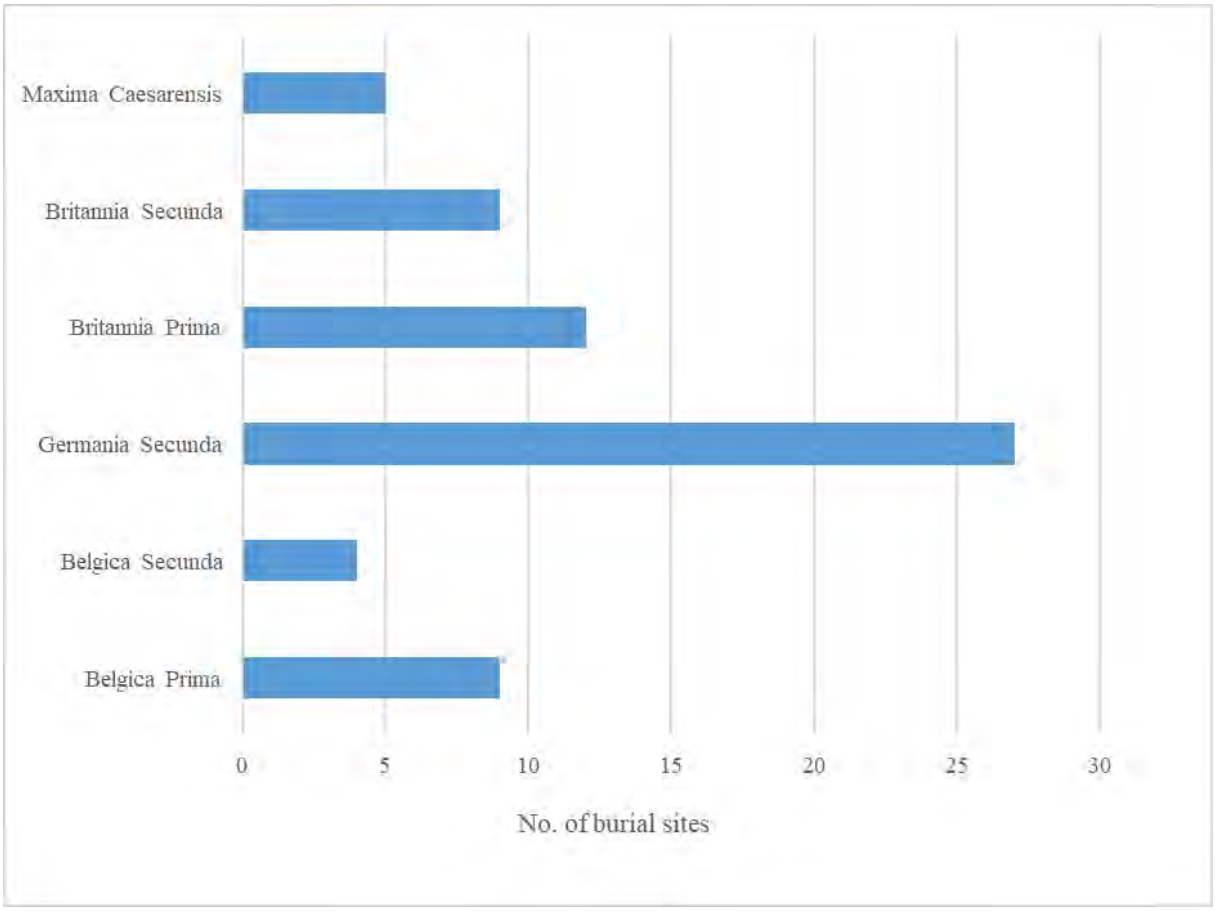

Fig. 6.8: Breakdown of villa sites displaying burial evidence in Northern Europe by Late Roman province (n = 66) (J. Dodd).

This latter observation stands in sharp contrast with the evidence from the Mediterranean region (see 6.3.4b), where the *pars rustica* was generally the selected zone for transitional burials. In the north, burials in productive zones are uncommon, with only one example: Ingleby Barwick (Willis and Carne 2013). Circumstantial data collection in previous studies (Ripoll and Arce 2000; Lewit 2005, 2007) does not stand up to statistical scrutiny. The assumption that bath blocks are the primary focal point for burial is not reflected in empirical data collection. Despite this, the use of bath blocks for mortuary activities is uncommon but widespread and it has been documented in four of the six Roman provinces surveyed in this study.

Britannia and the northwestern continental provinces form a socio-political zone utilising the same mix of funerary traditions and burial patterns in Late Antiquity. The phenomenon is not simply confined to the 5th century, the most intense period of socio-political change in the region, but rather has deep roots in the 3rd century when Romanised culture was traditionally viewed as having reached its zenith. This indicates that the phenomenon was not apparently connected to the movement of immigrant populations from across the Rhine and North Sea and that the social system, which encouraged individual or small-scale use of villa buildings for graves, was not shared by Merovingian or Anglo-Saxon groups. Immigrant communities generally utilised their own *Reihengräberfelder* cemeteries, in some cases overlying earlier Roman structures, from the early 5th century onwards.

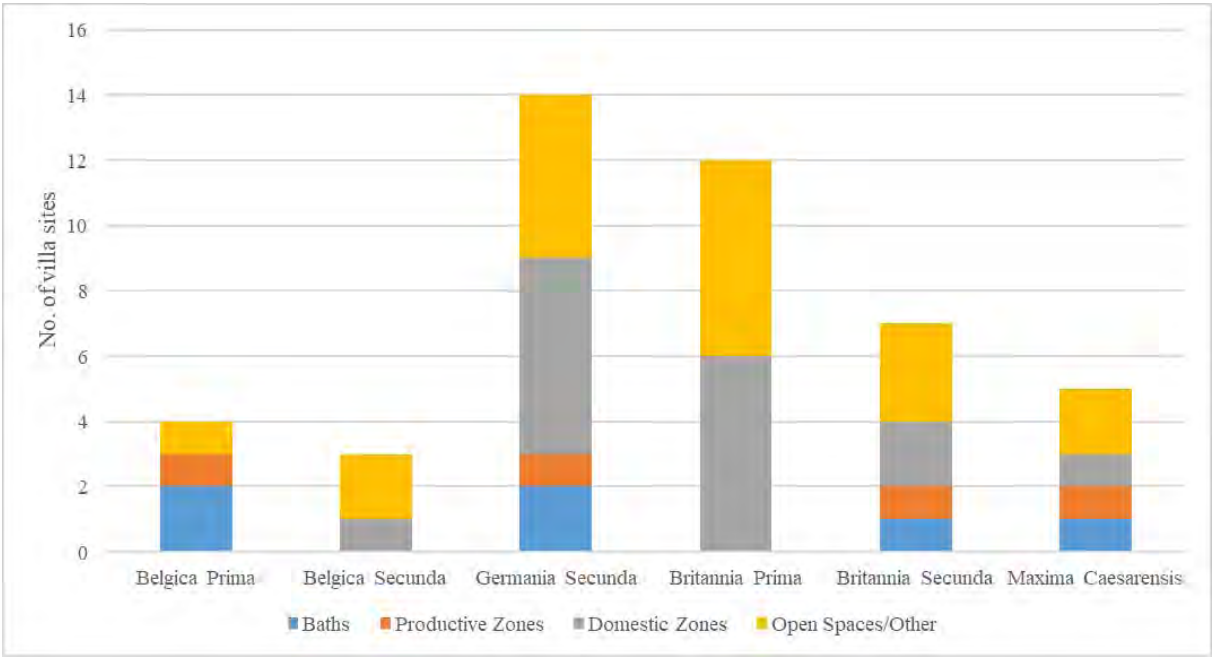

Fig. 6.9: Breakdown of villa sites where data is available for transitional burials in the northern provinces by site topography (*n* = 40) (J. Dodd).

Temporally, funerary transformation is a common and long-running thread throughout Late Antiquity (figure 6.10). As a phenomenon, it is most widespread and intense in the 4th and 5th centuries AD, with evidence in all the northwestern provinces except *Germania Prima*. This fits within the temporal spread of transformation laid out in figures 3.6 and 4.5 and demonstrates that most funerary transformation is concurrent with Roman socio-economic and political developments in the countryside. Despite this, there is a notable group of sites utilised between the 5th and 7th centuries AD. This group, generally consisting of larger migration-period cemeteries demonstrates the presence of new populations in the region, although this is not the full picture. In some sites in this group, the older tradition of singular or small-scale groups of unfurnished burials are still used, especially in *Britannia*. A small group of earlier burials is present in the 3rd century. Both *Germania Secunda* and *Maxima Caesariensis* demonstrate the early development of this phenomenon, with both provinces demonstrating evidence of unfurnished burials in abandoned zones of the complex, for example, the three burials placed in the decommissioned bath block at Eccles in *Maxima Caesariensis*. The temporal spread of funerary use demonstrates the long-term and embedded nature of the phenomenon within the later development of the villa landscape in the northern provinces.

6.2.2c.ii Southern European contexts

The data set from Southern Europe is more complex and generally of a lower quality. Naturally, this means that the conclusions based on the data have a larger bias. Despite this, the combined data brings a series of notable elements to the funerary transformation of the villa in Southern Europe as well.

Unlike the situation in Northern Europe, there is no dominating region to the macro-spatial distribution of funerary reuse of villa complexes in Southern Europe, something illustrated in figure 6.11. There is spatial parity between all three regions, weighed for the total number of sites. Notably, there is no appreciable difference between *Tarraconensis* and the two provinces in Southern Gaul. This is indicative of a high level of cultural integration between the northeast part of the Spanish diocese and Southern Gaul, suggesting that the Pyrenees provided little or no cultural barrier for the spatial spread of this phenome-

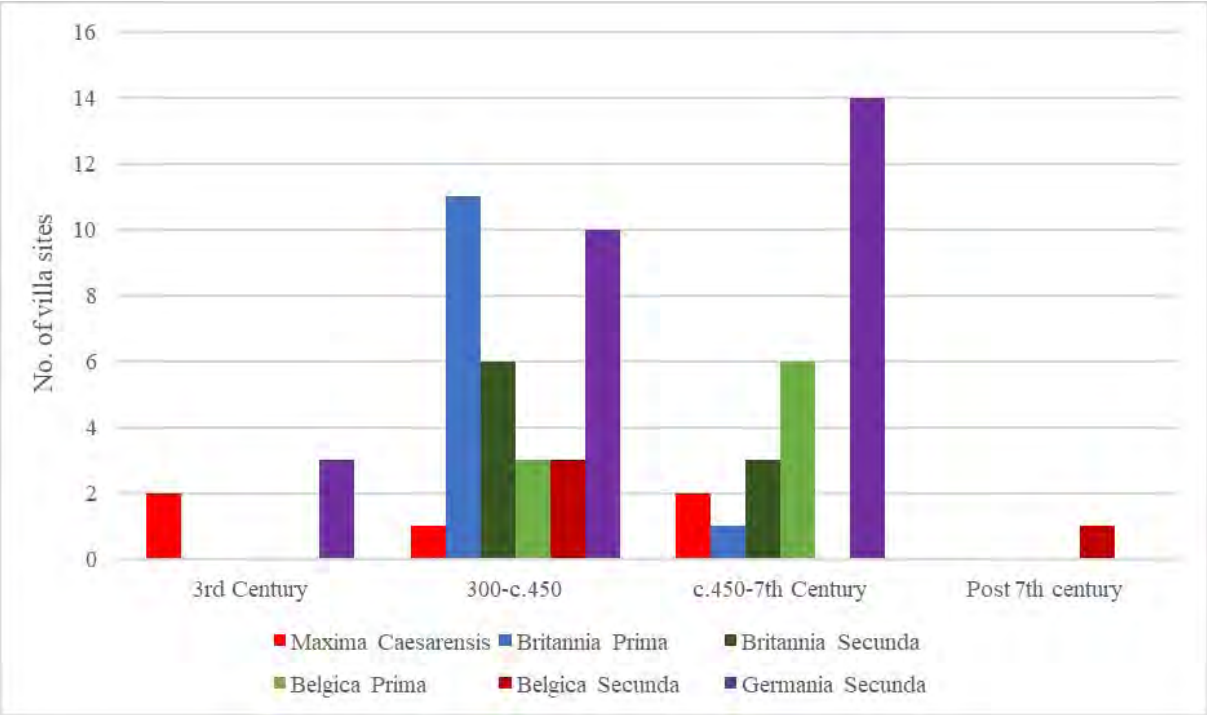

Fig. 6.10: Breakdown of villa sites displaying burial evidence in the northern provinces by temporal period (*n*=66) (J. Dodd).

non. This widespread balance between funerary reuse at villa sites is not easily explained. It is suggestive of a largely homogenous approach towards the funerary reuse of the villa landscape.

Little or no detailed survey of micro-locational geography of burials has been undertaken in Southern Europe, however, when considering the evidence laid out in figure 6.12, a pattern does emerge. The use of villa zones for burial activities is overwhelmingly dominated by the *pars rustica*. These zones were often, but not exclusively abandoned when utilised for burials. This is the dominant pattern across all regions and forms a key part of the make-up of burial activities at villa sites. Their distribution coupled with the abandoned nature of most of these zones, points towards a strong social adherence to the classical division between life and death and suggests that the patterns of transitional burial and termination rites were not part of Late Antique traditions in Southern Europe. Similar to the case in the northern continental provinces, the data also presents a distinct lack of bathhouses as burial locations. This stresses that the former bath block was not seen as an appropriate place for burials; either due to its significance in Romanised social interaction or its productive capacity, something common in the afterlife of villa bathhouses.

Notably, there is little widespread use of the *pars urbana* for funerary purposes, although it is present across all three regions. The minority use of main buildings for funerary purposes is problematic and seems to flip completely the situation laid out in figure 6.7 on its head. It is indicative of a completely different orientation of burial customs and points towards long-term occupational continuity in villa main houses rather than widespread termination burials or the erosion of the classical taboo. This continuity of occupation is borne out in the very long-term nature of significant numbers of Roman villas beyond the end of the 5th century and it may reflect the long-term social influence that Romanised taboos had upon burials customs in peripheral areas of the new Visigothic kingdom.

The temporal breakdown of funerary reuse of villas supports the assertion of a widespread and non-regional development of the phenomenon. This appears to be a widespread and equally distributed increase in funerary transformation from the late 4th century onwards, peaking in the immediate post-Roman period of the 6th century (figure 6.13). This peak is similar to the situation laid out in figure

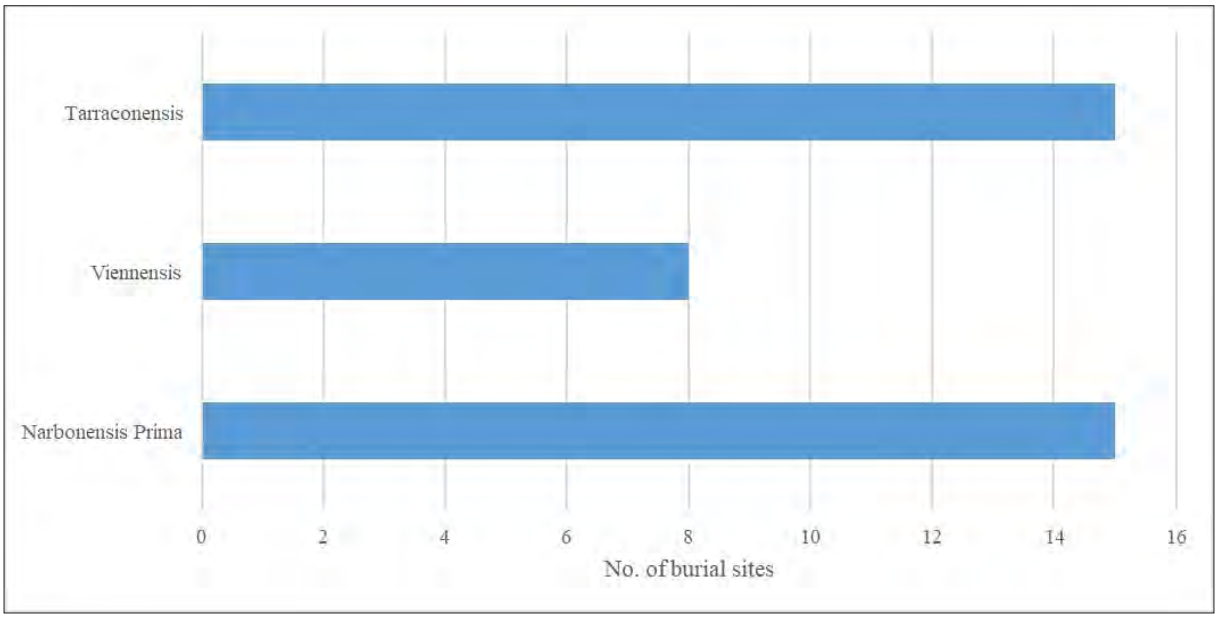

Fig. 6.11: Breakdown of villa sites displaying burial evidence where data is available in the southern study region by Late Roman province (*n*=38) (J. Dodd).

6.10; however, there are some significant differences. There is little gestation period or evidence of transitional burials in the 4th century, with a rapid increase in the numbers of sites undergoing transformation from the 4th to the 7th century. Unlike the case in the northern provinces, many of these post-Roman cemeteries are not characterised by the use of 'Germanic' style burials but rather consist of mixed groups of burials in a Late Antique tradition. These burials are primarily unfurnished and do not seem to display evidence of the use of 'Germanic' identifiers, fitting into the larger invisibility of Visigothic immigrants on the wider Roman landscape. These burials are generally homogenous and there is little variation from site to site amongst published examples, suggesting that the data presents a funerary landscape dominated by a Romanised population, little influenced by outside immigration or new 'Germanic' styles of burial.

The limited outliers in figure 6.13 are statistically anomalous. Later cemeteries are rare with one attested example from *Narbonensis Prima* that appears to be tied to a church structure whilst a single 3rd century outlier also appears to be an isolated example outside known trends. These two examples highlight the problematic nature of this data set. Very few cemeteries have been examined empirically, with little or no existing plans available and no significant osteological and chrono-typological detail. Naturally, this means that deeper analysis beyond the simple statistics undertaken in this section is difficult to conduct.

6.2.2d RELIGIOUS TRANSFORMATION

Although keenly studied in a variety of contexts in other regions, for example in Spain and Italy (Cantino Wataghin 1998; Chavarría 2004; 2007), religious transformation is not a widespread phenomenon in the areas under consideration in this study, with only 4% of sites demonstrating this form of Late Antique transformation. This type of transformation takes the form of overt religious change, usually the adoption of Christian elements to the built fabric of a site in the form of villa-chapels or private *oratoria*.

The spatial breakdown of a cultic presence of villa sites is overwhelmingly dominated by sites in *Tarraconensis* (figure 6.14). This domination is supported by sites in the two south Gallic provinces, where

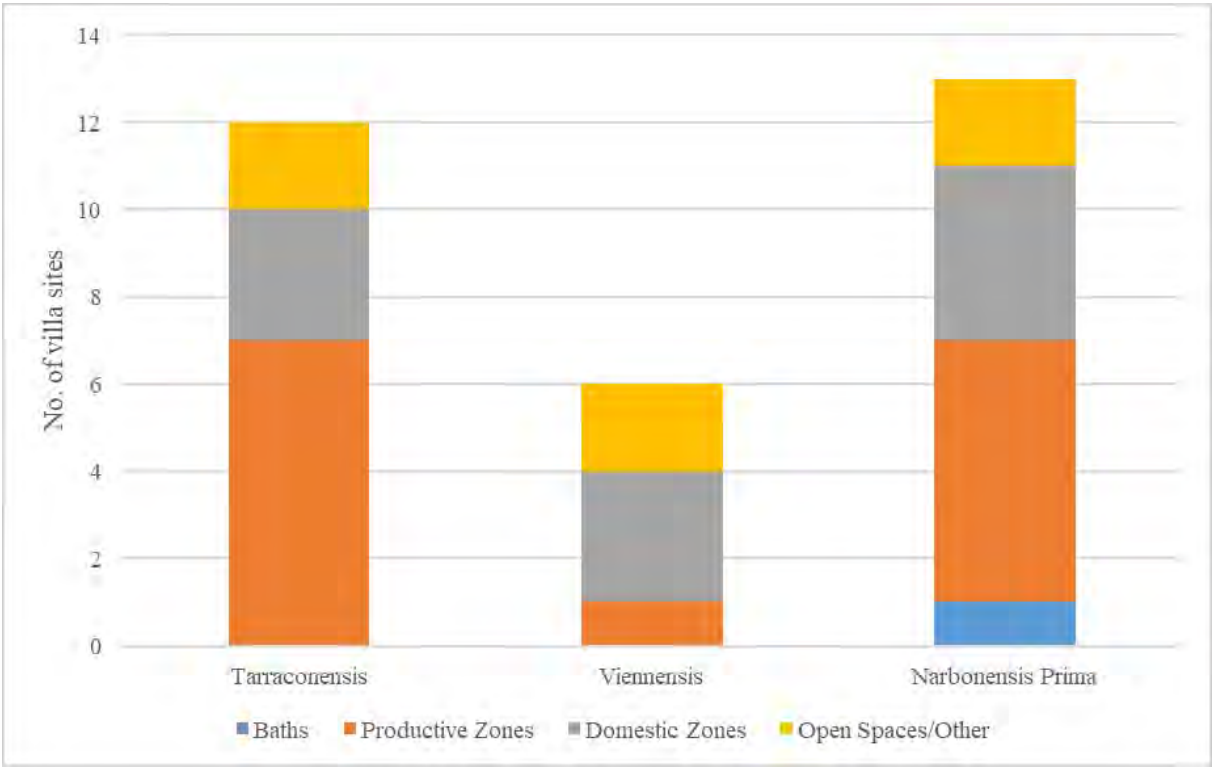

Fig. 6.12: Breakdown of villa sites where data is available for burial evidence in the southern study region by site topography (J. Dodd) (*n*=31).

there is also a high level of cultic transformation compared to the northern provinces. Despite this, the data for Christian religious construction linked to in-use villas is overall not present in the same levels that would have been expected based on the cherry picking of villa sites in previous studies. One key point within this data set is the difference that all regions bear from *Tarraconensis*. The presentation of the data may allow for the edge of a trend to be noted. It suggests that Tarraconensis was experiencing a radically different pattern from the south Gallic provinces and may have been undergoing a trajectory of cultic reuse more similar to the rest of the Spanish diocese, where many examples of 4th, 5th and 6th century villa churches have been noted. This imbalance points towards a divergence between rural cultic transformation in Spain and Gaul and perhaps towards a more acutely Christianising elite in *Tarraconensis* than in Southern Gaul.

As a whole, the cultic landscape is not an important element to the transformation of the Roman villa. Clearly, in some regions there was a social need or desire to construct private chapels and oratories by wealthy aristocrats; however, this is the exception rather than the rule. Instead, the data points towards the church not acting as the vehicle for social control as painted by the letters of Sidonius Apollinaris and his contemporaries (Anderson 1936; 1965), at least not through cult sites at elite rural estates. Christianity or at least overt Christianity is very much a minority element to the *milieu* of transformation on a wider scale and it is likely that it plays a much greater role in urban than in rural continuity.

6.2.IE FORTIFIED TRANSFORMATION

The fortification of villa sites within this study is not widespread. The phenomenon is spatially limited to the continental northwestern zones of *Belgica* and the Germanic provinces (figure 4.33). Despite this overwhelming regional bias of fortified villas in this area, outliers in *Britannia* do exist, although these are

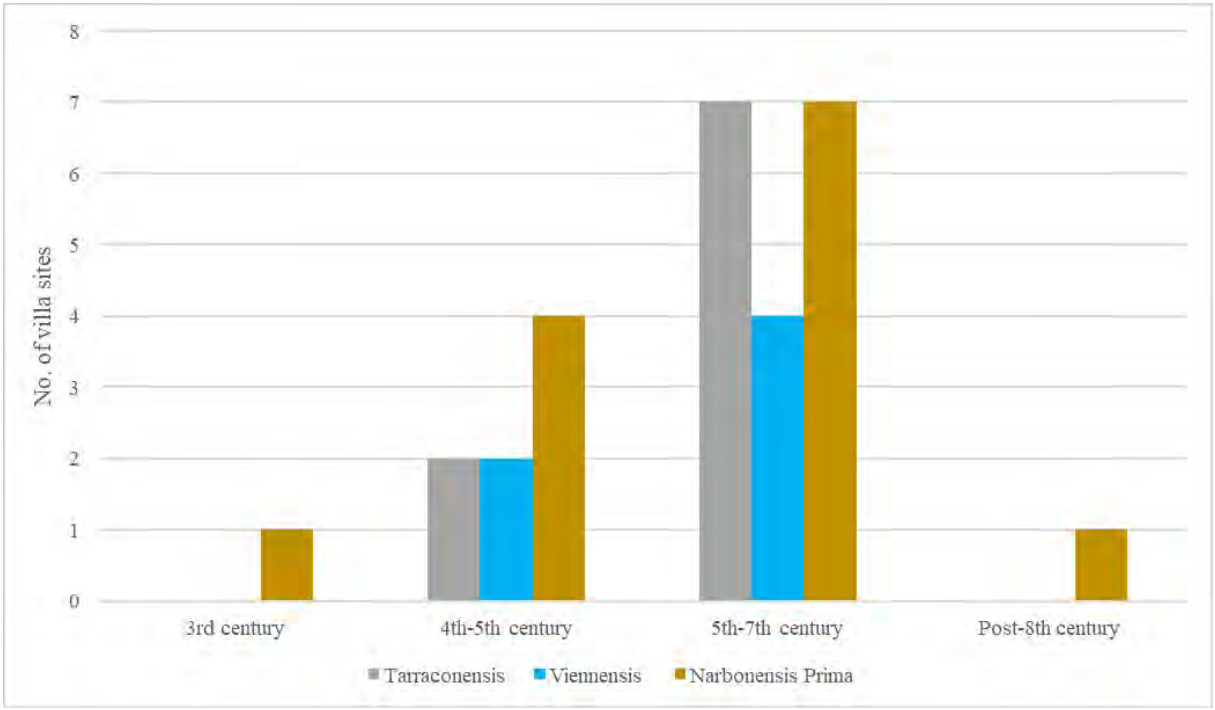

Fig. 6.13: Breakdown of villa sites displaying burial evidence where data is available in the southern study region by period (J. Dodd) (*n*=28).

poorly understood and not representative of the data set in general. A detailed discussion of the regional evidence is laid out in 3.4.6 and 4.4.6, with this section attempting to synthesise the data from each region.

Naturally, most evidence of fortified transformation is focused on wider frontier zones, apart from a sole site in *Britannia* (Branigan 1977) which may instead fit into a different tradition of walled small towns or *agglomerations secondaires* (see Wacher 1978). With the bulk of the evidence related to fortified villas coming from *Belgica* and the Germanic provinces it can be safely assumed that the construction of these sites is tied to instability or at the very least a sense of perceived instability by local populations. It represents the archaeological evidence for continuing instability, either in the form of internal instability or incursions across the Rhine, during Late Antiquity with a burst of intensity represented in the data set by increased conduction periods (see figure 4.37). The element of instability and proximity to the *limes* is something borne out in other regions outside the remit of this study, for example *Pannonia*, where fortified villas were a key element to the rural landscape (Thomas 1964; Biró 1974; for the important group of late 4th century sites on the model of Keszthely-Fenékpuszta, see Mulvin 2002).

The relative lack of such architectural features in *Britannia* and the Southern European zone indicate that the conditions there were not conducive to the construction of fortified elements as there was little or no need for extra-military defensive organisation and therefore the resources needed for such construction projects were not marshalled. This indicates that, outside *Belgica* and the Germanic provinces, instability was simply not at a high enough level in the perception of local magnates and rural populations to feel the need to construct *refugia* or defensive redoubts or, conversely, that the fortification of urban centres and the *enceinte* of secondary sites may have reassured the population and provided rural groups and elites with a form of defensive architecture. The picture from this study unequivocally points towards fortification in broader frontier regions, whilst areas such as *Narbonensis*, insulated from military campaigns or proximity to the *limes* saw no significant fortification or militarisation of villas. However,

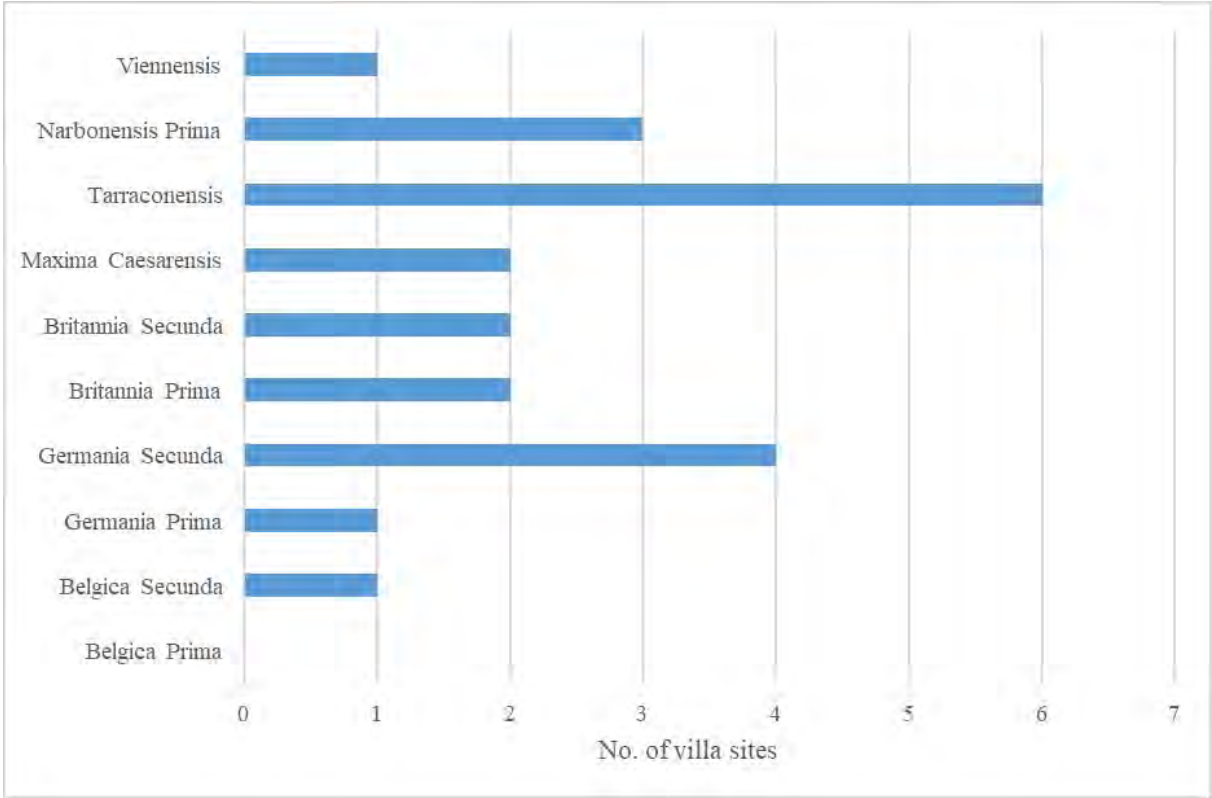

Fig. 6.14: Breakdown of cultic transformation where appreciable data is available by Late Roman province (*n*=23) (J. Dodd).

this is not the complete picture. Some regions outside the scope of this study also experience significant fortified transformation in Late Antiquity, for example, northern *Lusitania* and *Gallaecia*, which saw the fortification of hilltop sites associated with villas. These structures, traditionally referred to as *castroi* are tied to the establishment of the Suevo-Alanic kingdoms (Díaz and Menéndez Bueyes 2015, 155-157) and they bear some similarity to the *Höhensiedlungen* of the Moselle Valley (Gilles 1985b). The case of Late Antique Africa demonstrates that peaceful and prosperous regions saw a level of fortification at rural settlements to some degree (Mattingly *et al.* 2013). This suggests that fortified transformation is not necessarily tied to frontier zones or long-lasting exposure to instability and that a great deal of further work is needed to collect and synthesise data from across the Western Empire to establish the temporal and spatial spread of fortified villas on a much broader canvas.

6.3 INTERPRETATIVE CONCLUSIONS

6.3.1 THE LATE ANTIQUE VILLA ECONOMY AND ITS DEMISE

The grand economic narrative of the Late Antique villa economy rests upon several key pillars. Agricultural exploitation provided the vast bulk of taxation revenue (Jones 1964, 796) whilst the production of consumable commodities fed the army (Collins 2019) and the urban centres (Wickham 2005, 74-75; Esmonde Cleary 2013, 98). Traditionally, it has been generally agreed that there was a decline in agricultural exploitation, and by implication, production in the Later Roman Empire (Jones 1964, 812-823). We now know this not to be the whole story, with some regions experiencing production close to carrying capacity in the 4th century (Lewit 1991), although this picture is deeply fragmented. The second eco-

nomic process, parallel to the agriculture-tax cycle, is the monetary economy of the empire. The cyclical movement of gold around the system increasingly becomes standard in the 4th century, when more taxation was paid in gold rather than kind (Wickham 2005, 74). This shift, prompted by the stabilisation of the *solidus* as the primary currency (Banaji 2001, 69-74), drove a new economy of accumulation by the aristocracy (in some regions) and allowed the state more flexibility in levying taxes than collecting taxes-in-kind (Banaji 2001, 213-216; Wickham 2005, 74). Whilst Banaji's system is an important step in the right direction, it disregards the significant changes visible in the agricultural makeup of the economy, especially in the Western Empire, and does not attribute for gold exiting the cycle, something demonstrated in more recent work (Roymans 2017), and there is little attempt to examine regional cycles of depression and revival or *agri deserti*, although this failing is noted in his study (Banaji 2001, 215).

The grand narratives of production and consumption are to some extent visible in the data on villa transformation from each region. *Britannia* and Northern Gaul experience the development of an integrated system, where the focus of cyclical movement of resources shifts in Late Antiquity. Agricultural development in *Britannia* allowed the diocese to function as a supra-regional grain-basket, supplying the army on the Rhine *in lieu* of the less productive Germanic provinces and the Belgic hinterland. Instead, the villa landscapes of the continental northwestern provinces produced goods on a regional scale, somewhat isolated from the wider movement of bulk agricultural resources between the provinces. *Gallia Narbonensis* and Northeast *Tarraconensis*, however, present a different picture. The declining agricultural output of the villa landscape cannot be linked to other regions because other Mediterranean regions have not yet been analysed in detail. Despite this, more circumstantial evidence points towards other regions dominating production, especially of olive oil, in the Western Mediterranean from the 4th century onwards. This perhaps demonstrates competition at a regional level with other regions, such as *Baetica*, *Lusitania* and the African provinces (Mattingly 1988; Esmonde Cleary 2013, 266-267).

The villa economy of the various regions under study display two key thematic trends: diversification of production and localisation of supply and demand networks. This is supplemented by evidence for significant regional variation. The picture points towards a productive landscape less focused on the cultivation of bulk crops, primarily olives or vines in Southern Europe and grain in Northern Europe, in favour of a variety of other forms of economic activity. Small-scale metalworking, leatherworking, glass, salt production and bone or antler processing are all present in the archaeological record of villa sites. This shift necessarily resulted in lower level of output of individual bulk agricultural produce and shifted villa producers in the regions under study towards smaller economic output of multiple finished goods and agricultural produce. The second key trend is the localisation of supply and demand networks. This is important but not universal. This process sees the produce from villas being distributed to a smaller network of consumers, on a regional rather than supra-regional scale. Lower total outputs of a multitude of goods was both a cause and a consequence of the decline of inter-provincial trade and points towards a greater degree of self-sufficiency, something mirrored on the provincial scale (Millett 1990, 166-167). Local production and distribution of resources naturally led to a decline in requirements for long-distance bulk transport (see Jones 1964, 844-845, for an analysis of long-distance grain transport). Archaeologically, this shift manifests itself through changing production foci at villa settlements. For example, in the northwest continental sites, the evidence suggests that on-site processing and repair facilities for essential metalwork and agricultural implements was present at villa complexes. This indicates that villas developed local craft after the failure of production and market exchange at *agglomerations secondaires* with patterns in *Britannia* suggesting a link between continued agricultural production and small-scale metalworking.

Evidence from individual sites supports the assertion of economic fragmentation and diversification. Total economic output from the villa landscapes did decline across most regions, with only *Britannia* bucking this trend. This, however, does not mean that these landscapes were no longer producing a surplus, either for sale, military requisition, or taxation (Esmonde Cleary 2013, 267 for an exploration of surplus production). This decline is not a uniform phenomenon and occurs at different periods in

different regions from the 3rd century onwards. Naturally, the collapse of villa settlement north of the *Via Belgica* resulted in a serious decline in economic output from *Germania Secunda* (Gechter and Kunow 1986; Lenz 1999). It is likely that the reduced villa network of the 4th century in *Gallia Belgica* and the Germanic provinces will have been unable to match the 2nd century output levels, simply due to their reduced presence (Lenz 2001; Brüggler *et al*. 2017 for output modelling prior to the 3rd century). This was complemented by the abandonment or contraction of *partes rusticae* at villa sites in Northeast *Tarraconensis* and *Gallia Narbonensis*. The abandonment of formerly productive zones suggests that the local economy was not producing agricultural goods on the same scale, with either a shift towards pastoral agriculture (Leguilloux 1989) or a smaller total output. Some regions, such as *Britannia*, experienced the opposite, with production of bulk agricultural goods increasing until a sudden dramatic crash in the late 4th century. These economic shifts, beginning in the 3rd century, appear to accelerate into the Late Roman period and beyond, although establishing a supra-regional pattern to this is difficult without comparable data from a wide variety of regions. The trends in this data set point to the increasing fragmentation of the rural economy into smaller, less integrated units. Some of these units are interactive and interdependent on each other, for example, *Britannia* and Northeast Gaul and the Germanic provinces. However, at the regional level, most zones were economically functional without significant levels of supra-provincial interaction.

The key problem raised by fragmentation, diversification and lower total output is the role the transforming villa landscape played in the taxation process and the gold cycle. Analysis of the cyclic movement of gold in the countryside has naturally presupposed a high level of production complementing a monetary expansion phase after Constantine's reign (Banaji 2001, 87-88). Repeated evidence of total output declines in Gaul and the Germanic Provinces and to a lesser extent the Central Catalan Depression and the highlands of *Narbonensis* suggest that, in these regions, there was some dislocation of the link between production and the tax economy. In effect, this means that the *annona militaris* could not have been collected in its standardised form (Carrié 1994) simply because bulk agricultural goods were no longer a supra-regional product, except in *Britannia*. From the 4th century onwards, this may not have been too great an issue, as the proportion of tax-in-kind was steadily decreasing (Wickham 2005, 74). However, this does not solve the central problem of recognising production and sale and gold circulation and taxation. The dichotomy between higher government expenditure, assumed higher taxation rates (Wickham 2005, 62-64) and a decline in rural output has not been solved and several options are available as possible avenues for assessing this issue.

A key route to solving this is the assumption of wide-scale *coemptio* in the rural supply and demand cycle. This term refers to the systematic purchase of goods by the state, at state determined prices (Banaji 2001, 57-60; Wickham 2005, 75), although there is some evidence that these may have been at a relatively market level (Banaji 2001, 58; *Codex Iustinianus* 10.27.2.1). This system essentially acted as a maximum pricing system for the state purchase of rural goods.[28] It is likely that the state paid a lower price than the free-floating market rate, simply through bulk purchases, especially given the repeated evidence for complaints about the *coemptio* system in ancient texts (Procopius, *Historia Arcana* 23.11). Stabilising the rate payed for market purchases created a system by which the state could bulk purchase goods whilst injecting gold *solidi* into the rural economy in order to facilitate the tax-pay system (Banaji 2001, 60).

This system, though practically viable, may have had unintended knock-on effects to the tax system. Artificially curtailing the supply and demand system will have influenced the production of individual sites, especially given the probable undercutting of market prices. The *coemptio* system could only work when regions had the population and production capacity to produce a surplus for commutation into gold, later to be paid as taxation. The picture painted by the evidence from villas is that this was not

[28] Besanko and Braeutigam 2010, 408, fig. 10.9 for the modern interpretation of the equilibrium-maximum pricing model

always the case. Some regions were able to support this system, such as *Britannia* and to a lesser extent, *Belgica*, whilst other areas exited this cycle, in particular *Germania Secunda*. Frontier provinces such as *Germania Secunda* were only utilised as a conduit for gold exiting the system as bribes, pay-outs, and subsidies to 'Germanic' *foederati* groups (Roymans 2017, 66-70), typified by the Late Roman horizon of *solidi* hoards (Roymans and Heeren 2017). Regions without sufficient production could not have produced the required surplus needed by the state to pay the army and support the administration. This affected the payment and production cycle, forcing larger and larger taxation burdens on the remaining villa landscapes.

Arguably, taxation revenue could have been maintained by the increased output of other regions. *Britannia* experiences something of an expansion of production from both the villas in this data set and from ancillary evidence (Allen 2017) between the late 3rd and mid-4th centuries. There is some evidence that this may have been the case in other regions as well, such as the North African provinces (Lewit 1991). This expanded the tax base for the imperial authorities, as increasing intensive agricultural practices allowed for land assessments to be upgraded. This taxation increase, however large it was in practice, would not have maintained total taxation revenues at the necessary level to support the increased burdens of government expenditure as a proportion of revenue, especially considering the income lost from areas such as *Germania Secunda*. A further segment of revenue was made up from a shifting focus of direct land-taxes, made difficult if regions were not cultivated, to indirect taxation. Although long-distance trade had declined significantly, with evidence of bulk goods being only transported for the state, local and regional movement of resources was still present and it is conceivable to imagine tolls and taxes on this, for example at provincial or *civitas* boundaries. This is something supported in the written sources, where there is evidence of a sales tax of sorts (*collatio lustralis*) and internal transit tolls collected by the *comes sacrarum largitionum* (Jones 1964, 429-432). The historically attested and well-referenced salt tax (Boek 2008, 50-53) is the primary example for this. There is a trend in Roman archaeology to assume that the restored taxation system of Diocletian and his successors acted as a somewhat monolithic faceless bureaucracy, assessing *iūgerum* as '*fictitious parameters for the calculation of the varying tax potential of land, people, and animals'* [29] (Pack 2007), and raising taxation levies regardless of the socio-economic cost to communities. In practice, this cannot have been the case. Evidence from *Moesia* and Egypt suggests that both regions were taxed in different ways (Boek 2008, 67-68) and it is likely that regions beyond the reach of the papyrological or epigraphical sources, for example *Germania Secunda*, were special cases within the diverse fiscal system.

It is also worth considering the role played by regions exiting the tax-pay cycle in the 4th and 5th centuries. These provinces can also serve as a proxy for considering other regions exiting the Roman orbit in the late 4th and 5th centuries. The northern regions of *Germania Secunda* are the prime example of this. The region probably exited the larger integrated tax-pay cycle in the early 4th century, either through a lack of cultivated land or the depopulation of the area (Gechter and Kunow 1986; Lenz 2001; Heeren 2015 for regional examples). By the 5th century groups of 'Germanic' origin were becoming important actors in the frontier zone (Heeren 2017) and most scholars agree that hoarding in the region is related to the influx of gold to pay 'Germanic' groups as *foederati* within the wider imperial military network (Aarts 2015, 224; Roymans 2017, 66). This measure was seen as economically viable in light of the generally unproductive nature of the region. Gold from other regions could be used to spare direct state involvement in *Germania Secunda* and shift the burden of defence and presumably some level of cultivation or economic requirement onto groups outside the imperial tax hierarchy (Sivan 1987 for the legal issues surrounding *foederati* and taxation, Heather 1997, 68-71 for examples).

[29] https://referenceworks.brillonline.com/entries/brill-s-new-pauly/capitatio-iugatio-e226630?s.num=0&s.f.s2_parent=s.f.book.brill-s-new-pauly&s.q=Capitatio-iugatio

It is conceivable to see a range of these elements at play in the interaction and taxation of transforming villa landscapes. Several monetary and fiscal strategies: indirect taxation, higher rates of *coemptio* and land-grants of unproductive land played a role in the developing rural *milieu* of the 4th and 5th centuries. It is possible to view the demise of the Roman villa economy through the changes the state initiated in the tax-pay cycle. The abandonment of regions such as *Germania Secunda* saw sharp declines in the rates of tax revenue as these regions went 'off-line'. Naturally, the state apparatus required a level of tax to match a level of spending, and therefore tax rates increased for other regions to make up the shortfall. This took the form of the different strategies highlighted above. However, some individual producers were unable to cope with higher levels of demand, especially in times of recession and may have begun to enter transformation trajectories themselves, with the aristocratic elites shifting their focus towards their urban residences. Sites that were functionally unable to cope with demand dropped out of the villa economy, and in many cases, this phase coincides with the increase of larger estates in the 4th century in *Britannia* (Gerrard 2013, 136-140) and in parts of *Hispania* (Chavarría 2004). On a superficial level, this may appear to be related to the consolidation of villa landholding and the increasing importance of a domanial system, however, by the late 4th and early 5th centuries it is apparent that tax burdens on remaining villas increase, something exacerbated when regions left the Roman orbit, for example *Britannia* in 410 and Spain in *c.* 460. The resulting steady decline in revenue left the authorities in a much weaker state and hampered the efforts of the administration to support the burden of the army. By the middle of the 5th century, the weakened administration unable to support itself as tax revenue dried up. Rural production had become highly regionalised and therefore beyond the reach of indirect taxation mechanisms. Secondary to this, and only partially reflected in this data set is that *foederati* arrangements and barbarian settlements had taken large areas of land, both productive and unproductive, out of the tax-pay cycle, therefore further affecting the tax base which the Roman state relied upon.

6.3.2 RURAL SOCIETY AND ELITES IN TRANSFORMING CONTEXTS

The assessment of social change in Late Antique villas has been a key element to the analysis of social change since the beginning of modern investigation (*cf.* Petts 1997; Lewit 2001). Specifically, this revolves around questioning the role of elite and non-elite groups in rural society and the roles played by competing social groups in the transforming villa landscape. Traditional scholarship associated the groups inhabiting villa sites in two veins, either as the product of barbarian reuse (Joerres 1886, 93) or as the result of new, non-elite populations utilising the built fabric of the villa (Maloney and Hale 1996, 293; Balmelle 2001, 118 for example). Beginning in the 1990s the discussion shifted away from these assumptions towards a debate on what it means to be elite in the Late Antique or Sub-Roman countryside (Petts 1997; Lewit 2001; Bowes and Gutteridge 2005). This debate has generally been confined to two broad views. The first of these postulates that architectural changes, both at villas and in towns (Lewit 2001, 263-264) can be seen as the archaeological evidence for the elite adopting new ideas in the face of increasingly irrelevant Roman styles. The second view has generally focused on the social genesis of multi-layered societies with closer cooperation between elite and non-elite groups (Bowes and Gutteridge 2005, 411-412) with new definitions of power, status and organisation developing from this. Elites were able to maintain an economic power base by both adaption and apparent control of significant resources (Van Ossel and Ouzoulias 2000, 151). The data from this study points towards the second of these as a more attractive option, given the evidence from a range of British and Northern Gallic towns for continuity of elite residence. Instead of questioning the elite status of the inhabitants of what has been referred to as the '*post-built, subdivided and grave-riddled successor*' (Bowes and Gutteridge 2005, 405) to the Roman villa, this study will focus on addressing the three social groups which make up populations utilising the (transforming) villas and develop a new interpretation of changing social organisation.

There are three important social groups interacting with the transforming Late Antique villa landscape: elite groups, non-elite local populations, and 'Germanic' immigrants. Each of these groups interacts differently with individual sites and presents us with several strategies for social survival in a rapidly changing world. Elite groups represent the continuity of traditional aristocratic owners of the villas. This group includes both regionally significant landowners, without significant supra-regional power (Wickham 2005, 164-165), as well as the top 1% of the senatorial elite, who were able, as part the make-up of the imperial decision-making structure, to influence imperial policy (Heather 2017). This group represented the accumulation of social capital, the continuity of rural power structures (Esmonde Cleary 2013, 215-216, 236-240) and the Romanised civil elite, divorced from the militarised elites in the army or *foederati* groups. This is not to say that there is not a link; there is plenty of, admittedly Early Roman, evidence for veteran commanders owning villas in the northern provinces (Roymans 2011, 153-156, Kremer 2009, 128-129 for an appraisal) and this likely continued into Late Antiquity. The second group consists of a range of non-elite rural communities. This includes retainers, slaves, *coloni* and other lower status rural groups. Archaeologically, these groups are diverse, with some, such as slaves, relatively invisible in the regions under study (Roymans and Zandstra 2011 for an overview of the evidence in the north-west provinces) whilst others, such as labourers and peasant farmers are dominant in non-villa settlements across the regions under study (Jones 1964, 773-781; Van Ossel and Ouzoulias 2000). All these groups had a stake in society, either through the continuity of lease-holding (for example, *coloni*, Jones 1964, 795-799) or through simple food supply. The third and final group consists of 'Germanic' immigrants. This complex group consists of multi-ethnic societies, both peacefully settling and violently taking control of areas inside the Roman provinces. It represents both groups coerced or paid by the imperial administration into defending sectors of the frontier provinces as *foederati* (Jones 1964, 619-623; Heather 1997), such as the Frankish groups on the Rhine, as well as autonomous groups who were powerful enough to force settlements on the imperial government, for example the Visigothic settlement of 418/419 in *Novempopulana* (Burns 1993). These Germanic groups generally associated with new habitational and material culture styles as well as a distinctive shift in burial styles (Esmonde Cleary 2013, 79-80). Material evidence of this appears from the late 4th century onwards. These new communities can be viewed as both a militarising community and a developing military elite, especially in *Germania Secunda* (Heeren 2017, 168-170).

The villa-owning elite traditionally acted as the most socially powerful members of the rural community, tied into the wider *milieu* province and even imperial administration and policy making to some degree (Heather 2017, 14-17). They are present in all regions of this study, with their influence more apparent for a longer period in *Gallia Narbonensis* and Northeast *Tarraconensis* than in the northern provinces. Elite populations were able to draw on capital and resources to maintain long-distance networks and contacts in order to access material culture status symbols. The presence of these long-distance contacts is well-illustrated by the example of Ingleby Barwick, the most northerly villa in the study. Excavation of a series of buildings in a courtyard-like structure recovered imported Egyptian glass dating from the early 5th century (Price 2011, 73) suggesting that at least some rural elites were still able to marshal connections and networks to supply high-status goods and services. This is, however, something of an exception rather than the rule by the 5th century in the northern provinces. It may be that the landowner at Ingleby was connected in some way to the military hierarchy on Hadrian's Wall and therefore able to utilise military networks in a way not available to other elites. Instead, the general picture of elite utilisation of villa complexes in the northern provinces from the 4th century onwards is of increasingly localised elite networks and regionalising connections. There is little evidence for high-status Roman material culture in the northern provinces, whilst high-status construction shifts towards the urban sphere, especially in *Gallia Belgica* and the Germanic provinces (for example Tongeren, Vanderhoeven 2017). Social consumption of Romanised high-status objects seems to have precipitously declined or completely collapsed in the countryside by the late 5th century. This contrasts sharply with Southern Europe, where long-term

networks were maintained and elite activities appear to have continued, with construction phases and major investment in areas outside this study, such as *Novempopulana* (Esmode Cleary 2013, 245-248) and literary evidence in the form of the letters of Sidonius Apollinaris and his contemporaries (Anderson 1936; 1965). Archaeologically, elite presence at some villa sites continues into the post-Roman period, with new tessellation laid at many sites into the 5th century and imported ceramics and material culture present long after the collapse of Roman political power (Járrega Domínguez 2007). Repeated study has stressed that elites can no longer be measured by their adherence to *Romanitas* in the Late Antique period (*cf.* Lewit 2003; Bowes and Gutteridge 2005). This view has generally blanketed both Northern and Southern Europe. However, the picture is more nuanced. Spanish and Southern Gallic villa elites act in recognizably Roman ways throughout the 5th and 6th centuries, with new phases of construction, such as the octagonal building at Can Ferreons, in a Roman style. This indicates that the concept of shifting elite expression cannot be equally applied to all regions. The data points towards a patchwork of local elite identities and social markers ranging from Romanised constructions to the changed priorities of small-scale subdivisions of rooms or mosaic demolition.

Non-elite groups are a complex admixture of different social classes with different aims and intentions. The term here refers specifically to populations that did not own the villa estates, but likely were tied to them by either habitation or labour. This can include the wider freeholding peasantry, *coloni*, slaves, dependent labourers, artisans, craftsmen and other retainers, such as *bucellarii*. This latter group of semi-private and semi-public paramilitaries is mentioned in a wide variety of literature (Elton 1996, 102; Halsall 2003, 111-112) and appear to have been utilised as a private military force by generals, warlords and, by extension, the landowning elite (Diesner 1972). These diverse groups represented the backbone of the rural labour force. Their role in the aftermath of the villa landscape is difficult and contradictory. Clearly, the presence of a reasonably sized labour force was required for agricultural production, a highly labour-intensive process, and in specialised or semi-specialised roles such as metalworking and glass processing. However, this cannot be the whole story. The movement of artisanal and 'lower-status' habitational styles into the *pars urbana* of villas from the early 4th century onwards suggests that to some extent, non-elite local groups were occupying the social space traditionally monopolised by elites. This could either stem from the movement of the elite elements of rural society to urban contexts, something visible in Northwest Gaul at least (see section 4.5), although this is by no means uniform across all regions. Traditionally, this shifting habitational and productive focus has been viewed as an indicator of the changing priorities of elite groups and the adoption of a new social identity (Lewit 2001; 2003). However, many of these activities could not have been undertaken without access to significant specialised labour, for example, in the case of metalworking (Schrüfer-Kolb 2004, 48) or a labour force in the case of agricultural production (Erdkamp 1999, 569-571). This points towards the continuity of rural power structures and the ability of social classes to continue to marshal resources and labour on their rural estates, even when they were not residing there any longer. In this respect, the importance of non-elite groups lies in the ability to process or produce the resources required by the rural population, the urban community, and the state. The presence of non-elite groups in the *pars urbana* indicates a profound shift in the social stratification of sites. There are two scenarios for this. The first suggests that elite and non-elite populations were co-habiting in closer proximity that had previously been indicated by the archaeological evidence. This would point towards a hybridising approach to social interaction. The second scenario points towards the flight of elite groups to their urban houses, leaving the estates in the hands of various managers and other dependents, although the evidence for this in the three regions under study is patchy and there is likely a high level of regional variability. This new approach combined elements of both elite use of villa settlements, in the form of relatively continuity of material culture with non-elite architectural forms.

The final interest group are the new immigrant communities appearing in various regions from the 4th century onwards. These immigrants, usually characterised as 'Germanic', represent a new social group

within the villa landscape. Although 'Germanic' populations had been settled within the empire previously (Roymans 2009, 24 for examples from the 1st century BC), there had been little interaction with villa landscapes prior to the 4th century. New building styles, in the form of *Grubenhäuser* or hall-like structures are present at transforming villa sites such as Neerharen-Rekem (De Boe 1984; 1985; 1986). These incomers are archaeologically most visible in the northern provinces, where they settled in largely depopulated regions (Heeren 2017). In areas such as *Gallia Narbonensis* and Northeast *Tarraconensis*, where immigration occurred in a densely occupied and Romanised zone, there is little archaeological evidence of 'Germanic' habitation, despite evidence from the historical sources (Burns 1993; Burgess 1993, 43-44). The evidence points towards these new communities taking, initially, a more peripheral role on *agri deserti* or marginally productive land (Clark and Hamerow 1993 for the example of Mucking). The spread of 'Germanic' immigrants into *Britannia* and Northwestern Gaul is visible to some extent in the archaeological record from the 5th century onwards (Heeren 2017; Hamerow 2011[30]) and is rapidly proceeded by the abandonment or failure of villa settlements, although the mechanics of this transition are poorly understood. These new groups appear to be, initially, relatively egalitarian in material culture. Their aim was to gain recognition from the imperial government and therefore a share of the tax revenue and wealth (Wirth 1997, 24-25). 'Germanic' settlement at (former) villas in the north sits within a complex pattern of increasing social militarisation (Wickham 2005, 174-175; Esmonde Cleary 2013, 438-439). Many of these groups were part of a wider shift towards the militarisation of society. They played a role as both immigrants and in some cases *foederati* in service to the imperial administration or usurpers such as Constantine III, supported by imperial funds (Roymans 2017). The increasing role of military elites contrasted with the civil status of the other two social groups with a stake in the villa landscape. The civil nature of the Romanised rural aristocracy, rooted in the legal and bureaucratic structures of the empire became increasingly irrelevant in a world where these structures were no longer in force (MacGeorge 2002) or exploited by barbarians to maintain ethnic control, such as the case of the Visigothic kingdom (Buchberger 2017, 34-35). Military power, whether in the form of brute force or sanctioned state-backed violence, became a more potent element of power than interaction through the civil administration. This allowed 'Germanic' immigrant communities endowed with both state support and brute force to edge out other interest groups in their own favour, especially in the northwestern continental provinces, where Frankish groups were repeatedly utilised as *foederati* during the 5th century to defend the Lower Rhine (Heeren 2017, 164-167). This radically different occupation style is somewhat separated from the other two action groups and it may be that pressure from immigrant communities encouraged the alignment of social goals of the other two groups in order to maintain a balance.

The above picture does not extend to the areas of the Mediterranean littoral covered by this study. In both *Gallia Narbonensis* and Northeast *Tarraconensis*, the civil elite maintained a degree of social control into the 6th century and in some cases, later. Immigrant communities in Spain appear to be more rigidly controlled, at least, in a geographical sense. The Visigothic settlement is limited to the marginally productive Meseta region (Ripoll 2010, 165-166) and they did not begin to significantly influence the Catalan coastal regions and their associated towns until the 6th century at the earliest (Wickham 2005, 225-227), with a range of legal texts enforcing landholding leases in the *Ager Tarraconensis* reinforcing this view (Kulikowski 2004, 264). Civil elites maintained a degree of power after the end of the empire through the church, with the Visigothic state increasingly relying on Hispano-Romano magnates to staff the ecclesiastical administration (Wood 2012 for an overview of church-state relationships). This complex and radically different archaeological reality is difficult to establish and well beyond the scope of this study.

The reality of these interacting groups is an increasingly fragmented social landscape. Each group has an influence on the transformational trajectories of each region, although the level of influence differs

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from region to region. The overwhelming small-scale presence of transforming contexts in Northwest Europe points towards small groups of individuals acting as the primary drivers behind change. This contrasts with Southern Europe, where the evidence is suggestive of larger groups of individuals present in villa complexes. The lack of social stratification in transforming contexts suggests that these horizons are overwhelmingly represented by non-elite groups; however, this cannot be the entire picture. Such an analysis does not indicate where elite populations were located.

This analysis supports the assertion that transformational contexts and trajectories represent the formation of new social groups. These new groups comprised elements of elite and non-elite groups and created new societies in the transforming rural landscape. The mix of locally made ceramics, poorly maintained buildings and some elements of high-status material culture found at a variety of villa sites in this study supports this assertion. The most important aspect of this shadowy new social group is its short temporal span, especially in the northwestern provinces. Transformed sites in many cases rarely last more than a generation with very few sites, mostly located in *Gallia Narbonensis* and Northeast *Tarraconensis*, in occupation for more than a century. This suggests that this new social structure was unstable and points towards the merging of elite and non-elite groups was not, in the long run, a sustainable social strategy. The social bonds tying these societies together were simply not strong enough to develop sustainable long-term integration of transformed social groups into a wider post-Roman *milieu*. It seems more likely that transformed social groups were integrated into a 'Germanic' identity (Kanzaski and Périn 2003 for an overview) hastening the development of acculturated populations (Härke 2011, 16-19 for the example of Anglo-Saxon England). The development of more socially stratified 'Germanic' immigrant communities in the former Roman provinces and the development of new land claims, partly based on the ability to protect those regions (Theuws 2009, 307-308) seems to have socially superseded societies based around transforming villas. This does not necessarily mean that these immigrant communities were completely comprised of migrants but likely included locals in the process of integrating into the new social norms. This increased social sophistication of immigrant societies shifted the focus of power expression from the old villa owning elite and their dependents towards new landholding patterns, backed up in part by the threat of force.

'Squatter' societies represent an important stage in the transition between the Late Antique rural elite, developing between the civil society of the Roman Empire and the localised and militarised 'Germanic' elites. This shift is not uniform and takes place at different times in the regions under study. This change is initially felt in marginal zones of *Britannia* and the northern regions of *Germania Secunda*, where dislocation in the 3rd century prompted an earlier phase of change. The phenomenon spreads south over the course of the 4th and 5th centuries. *Gallia Narbonensis* and Northeast *Tarraconensis* are not overly affected by this shift until the late 5th century at the earliest, when 'Germanic' groups were establishing themselves within the provinces. The formation of social groups in the Late Antique rural landscape can be viewed through the lens of a short-term survival strategy. The preservation of local social identities and systems was considered more important than 'class'-based characteristics in light of increasingly irrelevant Roman styles and the accelerating regionalisation of contacts and networks at the end of Late Antiquity

6.3.3 Assessing migration: the establishment of new communities?

Traditionally, immigrant communities have been characterised as an important element to the wider transformation of the Late Roman villa landscape. This view drew on the historical evidence and couched migration within a tradition of decline and fall (Heather 2009, 32-37). Barbarians have been given a very important role in the destruction of sites in the border provinces (Agache 1983; Wightman 1985, 257-258; *cf.* Van Ossel and Ouzoulias 2000, 133-136) as well as the reoccupation of former villa centres in different styles (Hollevoet and Van Roeyen 1992, 215; Farnoux 1995). The simple biased rea-

soning behind this - that the destruction or ignorant use of high-status elite compounds must be the result of barbarian vandals utilising abandoned buildings or expelling their owners, no longer stands up to any scrutiny. Although migration plays an important role in the end of the Late Antique rural fabric, it certainly does not have the overwhelming role in the transformation of the physical fabric of villa buildings ascribed to it in older studies.

Immigration does, however, play a role in the transformation of rural contexts in Late Antiquity and has an important part in the transition from Roman provinces to *regnes*. The significant variation in assessing migration and the apparent differences in its archaeological visibility suggest that variable trajectories were followed in different regions by different groups of immigrants. The most radical of these differences, that of the divide between north and south, suggest that practical considerations for settlement and community construction were a defining feature to the establishment of new rural patterns. The appearance of 'Germanic'-style material culture and buildings at villa complexes in the northern provinces, either in use or abandoned, in the 5th century (for example, Härke 2011; Heeren 2017, 158-160) is not mirrored in Northeast *Tarraconensis* and *Gallia Narbonensis* (Ripoll 2010 for the some of the issues surrounding this), where only a handful of sites demonstrate evidence of occupation by 'Germanic' groups.

This diachronic issue within the rural aspect of the *Völkerwanderungszeit* highlights several issues. Migration was occurring within two vastly different zones, each of which had a variety of different socio-economic contexts and the differences in the data between north and south highlight this. 'Germanic'-style settlement was occurring in regions devoid of villa settlement or in regions with a transformed villa society whilst 'Germanic' settlement in the south was framed within a highly Romanised landscape with an active socio-economic structure tied into the larger Mediterranean network. It is perhaps telling that visualising 'Germanic' migration into the empire occurred in regions with low population densities and partially deserted or depopulated areas. The occupation gap between 'Roman' and 'Germanic' contexts in Northwest Gaul and the imposition of new housing styles in *Britannia* makes identification of the attributes of immigrant communities clearer. This is not the case in *Hispania* and *Gallia Narbonensis*, where 'Germanic' groups were contained within a vibrant rural society, much of which was only just beginning to experience significant transformation in the early 5th century. The social constraints placed upon these migrants likely saw a greater degree of forced integration, resulting in their relative invisibility until the main period of hybridisation and state formation in the 6th century. Secondary to this, the Visigoths were likely highly integrated into the empire by this point, with much of the Gothic *foederati* force armed and equipped in a Roman style having been inside the *limes* since 376 and in and out of the service of the central government since then. This pattern is not reflected in the 4th century in Northern Europe. Although both Saxons and Franks are attested in service to the Roman state, this was a case of small groups and individuals, not large population movements.

On a very simple level, our preconceptions about the movement of immigrants into the Roman provinces in the late 4th and 5th century has been proven correct in England, with the earliest Anglo-Saxon evidence at villa sites coming from *Maxima Caesariensis*, and for Frankish groups spreading from the north and east in *Germania Secunda* initially as far south as the *Via Belgica*. Within this wide-ranging conclusion, several points can be noted within the diverging trajectories of *Britannia* and Northeastern Gaul. The most important of these is the state of occupational continuity between the two regions. *Britannia*, especially *Maxima Caesariensis*, generally experiences a continuous occupation from 'Roman' villa to Anglo-Saxon settlement, without temporal breaks in the archaeological record. This stands at sharp contrast with northern Gaul. Sites in Gaul often experience a 50+-year gap between the last phases of the Roman settlement and the earliest Frankish phases of occupation (see 4.2). This indicates a degree of divergence in rural settlement patterns, beginning in the late 4th century between *Britannia* and Northwest Gaul. Continuity between Roman and Anglo-Saxon settlement contexts suggest a degree of accommodation, either violent or peaceful, between the inhabitants of transforming villas and new immigrant communities, especially when compared with the primarily empty landscapes in *Germania*

Secunda, where Frankish settlement could occur without reference to Romanised populations. Despite this apparently clean model, it does not explain the repeated use of abandoned villa sites in Northeast Gaul in the first place.

Within the villa landscapes of the Northeastern *Tarraconensis* and *Narbonensis Prima*, this project was faced with significant issues. The standards that have been applied as ethnic identifiers in scholarship in Northern Europe, notably in *Germania Secunda* and *Gallia Belgica* (for example, Theuws 2009; Heeren 2017; Heeren and Roymans 2018) are functionally unavailable in this region and when attempts are made to apply them, results do not correspond with the data set nor indeed present any pattern whatsoever. Several reasons were identified as the problem behind this. Housing styles, a key element for identification in Northern Europe is sadly impossible in Spain and Southern France, although several studies have identified the presence of SFBs in these regions and developed typo-chronological sequences (for example, Vigil-Escalera Guirado 2000). *Grubenhäuser* do appear, notably at Saint-Martin-le-Bas in *Narbonensis Prima*, however their dating in many cases is suspect and there is no evidence of byre houses or other 'Germanic'-style building at any site in the study zone. The ceramic continuity in these regions is vastly more complex than in Northern Europe. There is no equivalent of Rhine-Weser wares, transitional Alzei forms or *Terra Nigra* that can be used to identify new populations (Van Thienen *et al.* 2017). Instead, we are presented with a range of concurrent Late Antique forms and shapes and a strong import component (Raynaud 1993; Bonifay 2004; Járrega Domínguez 2007), many of which devolve from *longue durée* ceramic traditions. In some areas, notably modern Catalonia, most of these styles do not undergo rapid change until the appearance of Paleo-Islamic pottery in the 7th century. Ethnic identity has been tied to ceramic usage in only a few cases, for example in the poorly understood and referenced 'Visigothic Grey Ware' (González Salas 1945; Bourgeois 1970; Izquierdo Benito 1977). The same case is true of other artefact evidence. The evidence from the region unambiguously points towards a complete lack of 'Germanic'-style artefacts at most sites, only in a few cases is there evidence of anything possibly resembling 'Germanic' personal adornment. This problematic environment for analysis is further exacerbated by the burial evidence. Immigrant populations are difficult to identify. Although cemeteries on villa sites are known and recorded in this data set (figure 6.11), publication of these sites is very poor, and it is difficult to ascertain whether many of these graves fit into the larger Late Antique tradition of unfurnished burials or rather represent a different tradition. There is no comparable evidence to Northern Europe, where Anglo-Saxon and Frankish cemeteries are known from a variety of rural contexts (Lippok 2018 for a summary of the issues in Frankish contexts). Instead, we are presented with a landscape where 'Visigothic' *Reihengräberfelder* are clustered in the interior of the peninsular on the Central Spanish Meseta, away from the study regions where the burial landscape is dominated by cemeteries utilising seemingly Late Antique traditions with primarily unfurnished burial groups at villa sites. To further muddy the waters, there is little or no burial evidence for other groups. Traditional *etnische deutung* theory, applied in Spain in the 20th century (*cf.* Jiménez *et al.* 2018, 144-145), has significant issues when applied to Late Antique Iberia. Apart from coinage (for example, López Sánchez 2010), there is little archaeological evidence of either other 'Germanic' immigrant groups such as the Vandals (Vasquiero Gil 2010, 221-222) and Sueves (Heras and Olmedo 2015) or Ponto-Caspian or Iranian groups such as the Alans. Although the archaeology may not always be able to distinguish between fluid and complex 'Germanic' identities, there should be some level of differentiation between 'Germanic' material culture and that of the Steppe cultural blocs.

In response to this, several facets of immigration within the southern study region can be drawn out from this data. The lack of demonstrable *Reihengräberfelder* overlying or concurrent with transforming villas, as is the case in Northern Europe indicates that the rural population at these sites was not utilising 'Germanic'-style material culture. Two reasons behind this can be presented. Firstly, 'Germanic' material culture was simply not present in the rural sphere in this area, where traditional forms of ceramic and personal adornments were maintained. Rural cemeteries associated with the transforming villas of the region utilised overtly 'Roman' burial patterns set within the Late Antique traditions. Secondly, the indi-

cation is that there was little or no social framework for the use of such objects. Based on the assumption that lyriform belt buckles probably have some 'Germanic' element to them, the low densities of such finds on villa sites suggests that they were very much in the minority and did not form an integral part of transforming rural society in either Southern Gaul or northeastern *Hispania*. The lack of 'Germanic'-style housing at transforming villas in these styles indicates a pattern of non-exposure to 'Germanic' occupation patterns. Isolated examples of *Grubenhäuser* such as that at Vilauba do not indicate large-scale adoption of new housing styles by the rural population and suggest that rural elites based in the villas were staunchly traditionalist when it came to the adoption of new styles.

We are dealing with a confusing and often contradictory subject, of which 'Germanic' settlement at former and existing villa complexes is a small part. Modelling this shift from a Romanised rural landholding pattern to that of the new post-Roman kingdoms is difficult. We lack a statistically significant corpus of data for both regions, although despite this, some conclusions can be made. 'Germanic' settlement in the south does not appear on villa complexes. Therefore, villa complexes in *Gallia Narbonensis* and northeastern *Tarraconensis* hardly play a role in the development of new immigrant communities and societies. This is likely due to the *longue durée* of their occupation, with most villa settlements in both regions still occupied and relatively vibrant into the 7th century in some cases, something reflected in the long-term use of the landholding pattern along the Catalan Coastal Plain (Carreté, Keay, and Millet 1995). The retainment of the domanial system suggests that continuity in landholding was driven by Hispano-Roman rural elites that was still in place well into the Visigothic period. This likely contributed to the more stable nature of agricultural production along the Mediterranean coast, where evidence suggests that agrarian change only began to occur in the late 5th century. In response, Northern Europe demonstrates a different pattern. The lack of rural elites, especially in the northern parts of *Germania Secunda*, allowed something of a 'clean slate' for 'Germanic' settlement and landholding patterns to develop. The development of this 'Germanic' settlement pattern, not yet fully explored, does not explain the establishment of 'Germanic' sites on former villa terrain; although there is a range of reasons for this explored in both chapters 2 and 3.

It is likely that we are looking at two diverging trajectories for the development of immigrant communities and their impact on the Late Antique rural landscape: one in a substantially depopulated landscape and another in a highly populated and Romanised landscape. Two different approaches are needed for this and assessing it solely within the framework of the villa landscape is only one part of the narrative of migration.

6.3.4 Assessing rural burials in transformed contexts: changing burial traditions?

Transformation at Roman villas across all regions is marked by a distinct shift in burial practices with the appearance of a wide range of new forms of funerary expression. The neat, developed cemeteries of the Middle Roman period (for example, Hatton 1999, 160-180; Kießling 2008; Krier and Henrich 2011) were abandoned in favour of new funerary organisation. Only in *Britannia*, where infant burials are associated with rural buildings (Millett and Gowland 2015), is there much evidence of the use of villa terrain for funerary purposes before the second half of the 3rd century. The appearance of new burial expression through the utilisation of buildings for burial purposes occurs in both temperate and Mediterranean contexts with burials apparent in all zones of villa centres. This has repeatedly been characterised as 'bones in the bathhouse' (Lewit 2007), burials laid out in bath blocks, although this does not stand up to statistical scrutiny; in fact, they are something of a minority. Transitional burials at villa sites are an important element to the transformation of the rural landscape in the northwestern provinces (Dodd 2020).

Several proposals can be put forth for the developments in burial tradition documented in 6.2.1c.i and 6.2.1c.ii. In some cases, a mix of social imperatives may be the driver behind the increasing use of

(former) villa centres for funerary purposes in Late Antiquity and the Early Medieval Period. In terms of small-scale use, an attractive scenario is the use of the site for a termination ritual. Many of the single burials appear to be the last or near-to-last acts of human activity either on the site or in specific sectors of the site. This is the case at sites in continental Europe, such as Newel, as well as in Britain, for example at Gatcombe. Gatcombe is a key example for the argument for a termination ritual scenario at transforming villa sites. Three unfurnished east-west orientated graves were recovered just inside the defensive wall, dating probably to the 5th century AD. These burials were interpreted as Christian, partly due to the *chi-rho* graffiti found in Building 19, and the excavator believed that they were the final inhabitants of the site (Branigan 1977, 179). The placing of these burials, inside the perimeter of the site and adjacent to the shrunken zone of late 4th century occupation suggests that the burials act as a temporal marker in the evolution of the site. Small-scale burial use such as the example sketched above suggests that many of the unfurnished late 4th and 5th century burials were acting as boundary events for the termination of occupation at sites, especially in Northwestern Europe (Williams 1997; 2006).

A traditional approach to the use of villas as foci for burials has been the argument for the expropriation of the Roman legacy by new immigrant population. This generally is used to justify the large 'Germanic' cemeteries imbedded into villas in the 5th-8th century and may have a connection with state-formation and the rise of new rural elites. This approach has been postulated for various forms of reuse at older structures, including prehistoric elements of the landscape (*cf.* Williams 1997) and may have some relevance here. New populations moving into the region needed to build an identity beyond that of 'Germanic' immigrants and the expropriation of the ancestral geography of a micro-region can be interpreted through the medium of power-base construction. Although this can be applied to Northern Europe, the situation in Southern Europe, where there is a distinct lack of migration period cemeteries at sites suggests that other models must be developed for Iberia and *Gallia Narbonensis*.

The most important point, laid out in 6.3.4, illustrates the breakdown of the site topography of burials on villa sites. As previously mentioned, repeated studies have used non-systematic evidence collection to paint pictures of bath blocks, detached bathhouses, or domestic zones as the focal points for funerary use in Late Antiquity and the Early Medieval period. As demonstrated in figures 6.8 and 6.12, the evidence suggests that high-status features such as bath blocks are not a priority for burials. Instead, the data points towards the use of residential zones in Northern Europe and *pars rustica* zones in Southern Europe as the most popular area for interments. These zones act as focal points for funerary transformation and are complemented with a near-overwhelming use of the wider villa complex[31] for burial purposes, for example the use of courtyards or marginal zones between buildings. Two stages of changing burial rites are present in this data set. First this is the initial wave of 'termination ritual' burials. Archaeologically, this comprises individuals generally buried in an unfurnished Late Antique style, generally without grave goods and widespread across all regions. Labelling these burials as a 'termination ritual' is a conception of the phenomenon, however, given the evidence, it is hard not to conclude that the final phases of occupation cease with an inhumation burial. This phase marks the end of classical villa culture; the neat division between social spaces for the living and dead are dispensed with and new styles develop. Transitional burials at villa sites are indicative of a new developing style of occupation away from the grand buildings of the Roman past. The second, later phase is intimately tied to the expropriation of the past and of the Roman heritage by new groups moving into the former Roman provinces. These new cemeteries, often complete with wealthy individuals, demonstrate the beginnings of feudal power base construction and the use of the Roman heritage as a tool in building a land-based exploitation system (Theuws 2009, 309-314). The two different phases of reuse are both important elements to the transformation of the Roman

[31] Referred to as the *villaterrein* in Dutch, there is no standardised English term, the most related is a variant on *villa zone*.

rural landscape and demonstrate the wide-ranging social impact of villas on the long-term development of the post-Roman landscape.

6.4 FUTURE DIRECTIONS AND CONSIDERATIONS

Within the framework of this study, several directions for future research have been established, highlighting a path towards a more developed and integrated analysis of the transformation of rural society and economy in Late Antiquity and the Early Medieval Period.

A key element of this is a need for more fieldwork. Settlement archaeology has primarily focused on main buildings of villa complexes (Heimberg 2002/2003 for an example in *Germania Secunda*). Further work is needed to expand our knowledge beyond the main buildings of these sites and explicit attention is needed, both in re-evaluating older investigation and in new excavations towards finds, features and structures relating to the later development of villa complexes in Late Antiquity. Compounding this problem at individual sites is the significant regional bias present in any study of villa transformation. The northern provinces dominate the archaeological record, in particular, the German Lower Rhine (Gaitzsch 2011) and a great deal of further research is needed to bring information from the Mediterranean region into a more holistic and unified study of villa transformation. Addressing this is a fundamental step in developing a greater understanding to Late Antique transformation. A second and perhaps more important step is to develop of more holistic view of rural change beyond the simple analysis of villa transformation. A wide range of classes of site, including less monumental settlements, *agglomerations secondaires* and sanctuaries, all undergo similar forms of transformational trajectories from the 3rd century onwards and have received little or no wide-scale analysis. A prime example of this is the case of rural sanctuaries. Some of these sites are abandoned and reoccupied (for example, Born-Buchten, Derks and De Fraiture 2015 and Matagne-la Grande, Rober 1983), whilst others undergo occupation into the *longue durée* (such as Pagan's Hill, Rahtz and Greenfield 1956). Study of these other forms of rural settlement would begin to build up a more inclusive model of socio-economic change and allow the development of data-driven models outside the narrow framework of the prism of the villa economy. Within this framework, several individual elements do require significant analysis, for example, the reuse and demolition of Roman grave monuments. This phenomenon is widespread in Western Europe and in many cases is poorly examined with no data-driven cartographic modelling of distribution or regional trends nor the development of a model for the social drivers and implications of this trend.

A second important consideration relates to a more comprehensive model for analysis of villa transformation. Villa transformation is ubiquitous across the western provinces and an increase in the radius of study to include other regions, for example Central Gaul or *Lusitania*, would no-doubt expose other factors and would begin to establish differing trajectories in diverse regions within a large-scale spatial framework. This would prove most useful in the Diocese of Africa, where the scale, scope and even existence of a period of villa transformation is largely unknown. In tandem with large-scale data collection, several other important directions can be argued for; firstly, the establishment of a comparative methodology and study of *étiage* at villa sites would pay dividends for analysing the shrinking of rural sites in Late Antiquity. Establishing new cartographic and data-driven models of migration contexts and the appropriation of the rural landscape by new populations would allow larger-scale regional comparisons between north and south European contexts.

Finally, the study of transformation would be significantly improved by a series of related case studies in regions that experienced completely different socio-political and economic trajectories. For example, assessments of villa transformation and their afterlife of villa centres in *Dacia* and the *Agri Decumates* would yield comparative results for two regions where the withdrawal of Roman state organisation was earlier and where there is evidence, both literary and archaeologically, for late 3rd and 4th century migra-

tion. This would provide two valuable case studies for an earlier period in regions deliberately abandoned by the Roman state and consequently zones where the remaining local rural elites had to develop new survival strategies in a rapidly de-Romanising world.

6.5 FINAL THOUGHTS – A TRANSFORMED RURAL LANDSCAPE?

This study has brought together disparate regions and aggregated a large amount of data to develop conclusions on the scale and scope of villa transformation in the Roman West in Late Antiquity. It is a key structural element of the Late Antique villa landscape across all regions. Its long-term nature and repeated appearance mean that it cannot simply be written off as a simple phase prior to some form of abandonment. It represents the regionalisation of economic circles as well as the development of a new social order in the countryside as the social orthodoxy of *Romanitas* increasingly lost power in a new world order. On a large level, it represents the shrinking power base of an elite tied into a socio-economic network that could no longer be maintained. The shrinking power bases of these elites and the retreat of Romanised settlement back to the Mediterranean forms the most important element to come out of this thesis.

This is not, however, the most important point to take from the analysis in this thesis: the key point is the unsustainability of a traditional north-south model for rural development. Beginning with Pirenne in 1937, repeated studies have argued for a clear north-south divide in experience in Late Antiquity and the Early Medieval Period and this assumption has been extended to the villa landscape, despite a lack of sustainable data collection and comparative regional analysis. Most previous studies have cherry-picked sites or have not systematically collected data and therefore not been able to build up an extensive picture of the landscape. The picture painted in these studies, as well as wider archaeological literature depicts the villa landscape in the north disappearing in the late 4th and 5th centuries and blanket continuity in Mediterranean Europe until the 7th or 8th century.

In reality, the north-south divide is not so clear-cut. Areas of the north, such as *Belgica Prima* and *Germania Prima* experience longer trajectories of occupation, although it is somewhat varied. *Narbonensis* and *Viennensis*, both areas used to demonstrate long-term post-Roman continuity of villa settlements, are highly varied, with some regions seeing little or no villa occupation beyond the 5th century whilst other regions, such as the Bitterois seems to experience continuity of settlement into the Late Medieval period. Only *Tarraconensis* seems to undergo anything like the expected trajectory of villas decline and experiencing abandonment by the 7th century. This does not demonstrate a clear north-south divide but highlights the extreme regionalisation of the villa landscape in Late Antiquity and the Early Middle Ages and the importance of local factors in determining the transformation or abandonment of sites.

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